



**ENERGY - FROM - WASTE PLANT  
VICTORIA HOSPITAL CORPORATION  
LONDON, ONTARIO**

**AMBIENT AIR QUALITY  
PRE-OPERATIONAL SURVEY  
PART I  
August - September, 1984**  

---

**ARB-082-85-AQM**

**Prepared by  
R. Chapman  
for**

**The Southwestern Region  
Ministry of the Environment**

**Air Quality and Meteorology Section  
Air Resources Branch  
Ministry of the Environment**

**April, 1985**

### Copyright Provisions and Restrictions on Copying:

This Ontario Ministry of the Environment work is protected by Crown copyright (unless otherwise indicated), which is held by the Queen's Printer for Ontario. It may be reproduced for non-commercial purposes if credit is given and Crown copyright is acknowledged.

It may not be reproduced, in all or in part, for any commercial purpose except under a licence from the Queen's Printer for Ontario.

For information on reproducing Government of Ontario works, please contact ServiceOntario Publications at [copyright@ontario.ca](mailto:copyright@ontario.ca)

## Executive Summary

Two mobile air monitoring units (MAMU) from the Air Resources Branch measured ambient air quality parameters near the site of the proposed Victoria Hospital Corporation Energy - From-Waste (EFW) plant in London. This pre-operational survey determined the background ambient air concentrations of a large number of compounds which may be emitted from the EFW plant stack in various concentrations. None of the compounds, including sulfur dioxide, carbon monoxide, nitrogen oxides, mercury, and a large number of hydrocarbons, and chlorinated hydrocarbons, exceeded or approached any Ontario air quality criteria.

## **TABLE OF CONTENTS**

### **Executive Summary**

	<b><u>Page</u></b>
1.0 Introduction	1
2.0 Mobile Air Monitoring Units (MAMU)	1
3.0 Monitoring Locations	2
4.0 Results and Discussion	2
5.0 Conclusions	3

### **Tables and Figures**

APPENDIX A	-	Common Pollutants - Complete Data Set
APPENDIX B	-	Gas Chromatograph Results - Complete Set
APPENDIX C	-	Daily Weather Synopsis



## LIST OF TABLES AND FIGURES

Table 1	MAMU #1 Instrumentation
Table 2	MAMU #2 Instrumentation
Table 3	"Critical Receptor" areas
Table 4	Monitoring Locations and Periods
Table 5	Results Summary
Figure 3.1	Map showing monitoring locations

## 1.0 Introduction

At the request of the Southwestern Region, the Monitoring and Instrumentation Development Unit of the Air Resources Branch conducted an ambient air quality survey in London during the period August 27 to September 7, 1984. The air sampling was done as a pre-operational survey near the site of the proposed Victoria Hospital Corporation Energy - From - Waste (EFW) plant. The purpose of the survey was to determine the ambient air concentrations of a large number of compounds which may be emitted from the EFW plant stack in various concentrations, namely: sulfur dioxide ( $\text{SO}_2$ ), carbon monoxide (CO), nitrogen oxides ( $\text{NO}_x$ ), mercury (Hg) and a large number of hydrocarbons, and chlorinated hydrocarbons. A similar survey will be performed after the EFW plant is in operation in order to assess its impact on the ambient air quality.

Two mobile air monitoring units (MAMU) were used to maximize the amount of data obtainable during the allotted survey period, and to isolate emissions from any existing sources by doing simultaneous upwind and downwind measurements.

## 2.0 Mobile Air Monitoring Units (MAMU)

Two mobile air monitoring units (MAMUs) were used in the EFW plant pre-operational survey. Each unit is a self-contained mobile laboratory equipped with advanced analytical instrumentation dedicated to ambient air monitoring. The instrumentation packages in each vehicle are nearly identical to each other and are listed in Tables 1 and 2. Each MAMU was outfitted with a gas chromatograph (Hewlett-Packard 5880) coupled to an organic preconcentrator of our own design. Ambient air was drawn into the preconcentrator at 100 ml/min through a 10 mm O.D. glass cartridge containing absorbents Florisil, Molecular Sieve 13x and Spherocarb. The sampling periods were 60 minutes so that the data could be directly compared to Ministry criteria for ambient air quality. Contaminants trapped by the absorbents were thermally desorbed, prefocused and injected at the GC column head. The sample was analyzed with a 25 metre cross-linked SE 54 and OV-1 columns and equipped with flame-ionization detectors. Minimum detection limits were in the 0.2 - 5  $\text{ug}/\text{m}^3$  range.

### 3.0 Monitoring Locations

The selection of monitoring locations was based upon the list of "critical receptor" areas noted in an environmental impact study<sup>1</sup> and reproduced in Table 3.

As determined by the wind direction on an hourly basis, the MAMU's were positioned downwind of the site for the proposed EFW plant in whatever critical receptor area was most suitable; otherwise, schoolyards and apartment building parking lots were the usual monitoring sites. The precise monitoring locations are listed in Table 4 and displayed on the map in Figure 3.1.

### 4.0 Results and Discussion

A summary of the results is contained in Table 5. Sulfur dioxide ( $\text{SO}_2$ ), carbon monoxide (CO), nitrogen oxides ( $\text{NO}_x$ ), total hydrocarbons (THC) and mercury (Hg) were found in relatively low concentrations during all monitoring periods. The complete data set for these compounds is in Appendix A. None of the one-hour air quality criteria (or 24-hour if no one-hour criterion exists) were exceeded or approached. The data can also be presented in ½-hour average concentrations if a greater time-resolution is required in future analyses.

Although the compounds in Table 5 showed relatively low concentrations for all periods there is a small degree of uncertainty about the mercury concentrations. The mercury analyzer seemed to function properly during the survey, was calibrated daily, and was checked by the service department of the manufacturer approximately two weeks after the survey (only minor adjustments were needed). However, there are no recent background measurements of mercury in urban ambient air in Ontario available for comparison. Several years ago typical levels were found to be less than  $0.10 \text{ ug/m}^3$  in the Toronto area. Since the mercury levels reported herein are generally above the  $0.10 \text{ ug/m}^3$  level, there will be greater confidence attached to these results when the measurements are repeated in the next phase of the pre-operational study.

---

1. By Victoria Hospital's Consultants, presented to Environmental Assessment Board hearing in 1983.

The complete set of gas chromatographic (GC) results is contained in Appendix B. The total organic compounds (TOC) concentration, as determined by the gas chromatograph for one-hour sampling periods, was always relatively low compared to values for typical urban air in Southern Ontario. None of the 117 organic compounds monitored by GC exceeded or approached their Ontario criteria. Consideration of the toluene: benzene: xylene: ethylbenzene ratio (TBXE) during those few periods when the TOC concentration exceeded  $200 \text{ ug/m}^3$  showed TBXE ratios (aprox. 6:3:4:1) very similar to the value known for automotive exhaust emissions (4:3:4:1). Although Commissioners Road was closed to through traffic between Wellington Road and Adelaide Street during the survey period, there was a lot of heavy equipment and vehicle activity due to the road crews. In addition, there was increased vehicle traffic on Adelaide Street as part of the detour. There is also a commercial/light industrial area on Adelaide Street between Commissioners Road and Thompson Road; this area contains two gasoline stations, two printing shops and a linen supply company. These potential sources, together with the gasoline station near the EFW plant site, may account for any deviation from the normal pattern of automotive exhaust emissions.

## 5.0 Conclusions

All compounds were found only in relatively small concentrations throughout the survey period. Ontario ambient air quality criteria were not exceeded or approached at any time.

TABLE #1

## THE INSTRUMENTATION OF MOBILE AIR MONITORING UNIT #1

Instrument	Manufacturer	Analytical Technique	Full Scale Sensitivity
THC, CH <sub>4</sub> , TH-M analyzer	Ingenieur-Produktions-Gruppe Munchen (IPM) RS-t	Dual flame ionization	50 ppm THC (as CH <sub>4</sub> )
H <sub>2</sub> S, SO <sub>2</sub> , NO <sub>x</sub> sources	Hartmann & Braun Prufgasgenerator	N/A	N/A
H <sub>2</sub> S/SO <sub>2</sub> analyzer	Monitor Labs 8850 c/w ML 8770	Fluorescence	1.0 ppm SO <sub>2</sub> 0.5 ppm H <sub>2</sub> S
NO <sub>x</sub> , NO <sub>2</sub> , NO analyzer	Monitor Labs 8840	Chemi-Luminescence	1.0 ppm NO <sub>x</sub> (as NO <sub>2</sub> )
CO analyzer	Thermo Electron P48	Gas Filter Correlation	100 ppm CO
O <sub>3</sub> analyzer/ source	Dasibi 1003-AAS	UV Absorption	1.0 ppm O <sub>3</sub>
CO & THC sources	Matheson	Compressed Gas	N/A
Gas Chromatograph	HP 5880 Dual Capillary Column	Flame Ion-ization Det.	as set per calibrations

## Meteorological Instrumentation

Instrument	Manufacturer	Scale
** Wind speed	Lambrecht GmbH	km/hr
** Wind direction	Lambrecht GmbH	degrees
Temperature	Weather Measure (WM) T621	degrees Celsius
Humidity	WM-HM-11P	absolute & %
Barometric pressure	WM-BM70-B242	millibars
Solar Radiation	WM Star Pyranometer	milliwatts/cm <sup>2</sup>

\*\* These instruments are located on top of a 10 metre retractable tower

TABLE #2

## THE INSTRUMENTATION OF MOBILE AIR MONITORING UNIT #2

Instrument	Manufacturer	Analytical Technique	Full Scale Sensitivity
THC, CH <sub>4</sub> , TH-M analyzer	Ingenieur-Produktions-Gruppe Munchen (IPM) RS-t	Dual flame ionization	50 ppm THC (as CH <sub>4</sub> )
H <sub>2</sub> S, SO <sub>2</sub> , NO <sub>x</sub> sources	Hartmann & Braun Prufgasgenerator	N/A	N/A
H <sub>2</sub> S analyzer	Monitor Labs 8850 c/w ML 8770	Fluorescence	0.5 ppm H <sub>2</sub> S
SO <sub>2</sub> analyzer	Hartmann & Braun Picoflux 2T	Conductometric	3.0 ppm SO <sub>2</sub>
NO <sub>x</sub> , NO <sub>2</sub> , NO analyzer	Monitor Labs 8840	Chemiluminescence	1.0 ppm NO <sub>x</sub> (as NO <sub>2</sub> )
CO analyzer	Thermo Electron P48	Gas Filter Correlation	100 ppm CO
O <sub>3</sub> analyzer/ source	Dasibi 1003-AAS	UV Absorption	1.0 ppm O <sub>3</sub>
CO & THC sources	Matheson	Compressed Gas	N/A
Gas Chromatograph	HP 5880 Dual Capillary Column	Flame Ionization Det.	as set per calibrations

## Meteorological Instrumentation

Instrument	Manufacturer	Scale
** Wind speed	Lambrecht GmBH	km/hr
** Wind direction	Lambrecht GmBH	degrees
Temperature	Weather Measure (WM) T621	degrees Celsius
Humidity	WM-HM-11P	absolute & %
Barometric pressure	WM-BM70-B242	millibars
Solar Radiation	WM Star Pyranometer	milliwatts/cm <sup>2</sup>

\*\* These instruments are located on top of a 10 metre retractable tower

Table 3

Critical Receptors<sup>2</sup>

Name	Distance from Victoria Hospital EFW km	Height Above EFW Groundlevel m
1. Bristol Place Apts <sup>1</sup>	0.864	36
2. Westminster Hospital	0.49	15.6
3. Pond Mills and Commissioners Rd.	1.77	14.6
4. Planned Apt. Bldg. <sup>1</sup>	0.30	32
5. New Victoria Hospital	0.36	29.0
6. New Parkwood Hospital <sup>1</sup>	0.231	28
7. Grade @ 6 km SW of site	6.04	52.2
8. Grade @ 8 km SW of site	8.05	43.9

- Note: <sup>1</sup> Revised distance and elevation of receptor  
<sup>2</sup> As contained in Victoria Hospital's consultant's report  
presented at Environmental Assessment Board hearing in early 1983. •

**Table 4**  
**Monitoring Locations and Periods**

MAMU #1				MAMU #2		
Date	Period #/Time	Location	Map I.D. Fig. 3.1	Period #/Time	Location	Map I.D. Fig. 3.1
August 27	271A 16:42-18:00	C.C. Carrothers School	A	271 B 16:50-17:51	Parkwood Hospital South Side	B
28	281 A 14:48-16:49	Boys Club - Tumblesons Pond on Southdale	D	283 B 15:11-17:06	G.A. Wheable Secondary School	E
30	302 A 14:52-18:57	Westminister Apts.	F	303 B 16:57-18:59	Glen Cairn Public School	G
31	312 A 11:30-13:31	New Parking Lot, S Of New Victoria Hosp.	H	312 B 10:12-12:11	Westminister Apts.	F
	313 A 13:58-16:00	#7 Lupus Place	J	313 B 12:47-15:43	Arthur Stringer Public School	K
Sept. 4	043 A 12:07-13:44	Millers Green Sub-Division	M	042 B 11:44-12:44	Bristol Apts	L
	044 A 13:46-16:03	Millers Green Sub-Division	M	043 B 12:49-15:52	Bristol Apts	L
5	052 A 11:04-14:01	WCW - Veterans Home	N	052 B 10:56-14:01	Parkwood Hospital South Side	B
	053 A 14:43-1653	Sutton Farm, Approx. 3 km NE Lambeth on Route 24	O	053 B 14.:36-16:38	Liftow Parking Lot 2 km ENE Lambeth on Route 135	P
Sept. 6	064 A 15:14-16:30	School at Thompson and Chesterfield	R	063 B 15:00-17:02	St. Sebastion Separate School	Q
7	072 A 10:42-12:40	G.A. Wheable Secondary School	E	071 B 10:36-11:51	Rowntree Park, 1 km NW of EFW Site	S



Table 5  
Results Summary - Maximum 1-hr Average Concentration  
(ppm, except as noted)

Monitoring Period #	SO <sub>2</sub>	CO	NO <sub>x</sub>	Hg <sub>3</sub> ug/m <sup>3</sup>	THC	TOC (ug/m <sup>3</sup> )	Upwind or Downwind
271 A *	-	-	-	-	-	13	D
271 B	n.d.	0.7	-	-	1.3	8	U
281 A	n.d.	-	0.02	-	1.8	20,41	U
283 B	0.02	1.2	0.03	-	2.4	482,328	D
302 A	0.03	2.0	0.02	-	1.4	64,121	D
303 B	n.d.	0.5	n.d.	n.d.	1.3	50,86,36	D
312 A	0.01	0.9	0.01	-	1.3	18,32	U
312 B	n.d.	1.1	0.02	0.10	1.3	74,93	D
313 A	n.d.	0.7	0.01	-	1.7	24,27	D
313 B	0.01	0.5	n.d.	0.14	1.5	23,20,20	D
042 B	n.d.	-	-	0.25	1.2	138	D
							some MAMU exh.
043 A	0.02	-	0.02	-	1.4	4,12	D
043 B	n.d.	2.2	0.06	0.37	1.3	152,209,247	D
							some MAMU exh
044 A	n.d.	0.7	0.01	-	1.4	4,7	D
052 A	n.d.	0.5	0.02	-	1.2	14,12,13	D
052 B	n.d.	0.2	0.02	0.38	1.4	11,191,72	D
053 A	n.d.	1.4	0.07	-	1.3	64,90	D
053 B	n.d.	n.d.	n.d.	0.25	1.3	63,26	D
063 B	n.d.	0.6	0.02	-	1.1	83,63	D
064 A	0.01	1.7	0.02	-	1.2	67	D
071 B	0.04	0.6	0.05	-	1.3	87	D
072 A	0.04	0.4	0.02	-	1.4	36,65	D
Ontario Air Quality Criterion	0.25 (1-hr)	30 (1-hr)	0.20 (1-hr) NO <sub>2</sub>	2.0 (24-hr)	-	-	
Min. Det. Level	0.01	0.1	0.01	0.05	0.1		

\* - A refers to MAMU #1  
- B refers to MAMU #2



## Appendix A

LONDON\_84 : 041A

Start: 84/09/04 11:39 Scan: 60 sec  
Average: 60.00 min Report: 10.00 min  
Loc: MILLER'S GREEN NEW DVPT

Time	CO Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Spd	Methane Wind-Dir	NOx	NO2	NO	Ozone	SolarRad
11:39-12:39	-	-	-	-	-	-	-	-	-	-
11:49-12:49	-	-	-	-	-	-	-	-	-	-
11:59-12:59	- 18.8	1.30 61.	.02 1000.9	.21 15.	1.12 299.	.02	nd	.02	.019	.066
12:09-13:09	- 19.0	1.32 61.	.02 1000.9	.22 15.	1.13 302.	.01	nd	.01	.019	.063
12:19-13:19	- 19.0	1.34 61.	.01 1000.8	.24 16.	1.13 302.	.01	nd	.01	.019	.061
12:29-13:29	- 18.9	1.36 60.	.01 1000.6	.26 17.	1.13 305.	.01	nd	.01	.020	.061
12:39-13:39	- 19.2	1.37 59.	nd 1000.6	.27 18.	1.13 305.	.01	nd	.01	.020	.071
12:49-13:49	- 19.6	1.39 58.	nd 1001.0	.29 19.	1.13 308.	nd	nd	nd	.021	.072
12:59-13:59	- 19.5	1.42 57.	nd 1000.9	.31 23.	1.15 311.	nd	nd	nd	.021	.068
13:09-14:09	- 19.5	1.41 56.	nd 1000.8	.30 25.	1.15 309.	nd	nd	nd	.022	.075
13:19-14:19	- 19.6	1.40 55.	nd 1000.7	.29 26.	1.14 305.	nd	nd	nd	.022	.078
13:29-14:29	- 19.5	1.40 54.	nd 1000.6	.29 27.	1.14 306.	nd	nd	nd	.022	.070
13:39-14:39	- 19.5	1.40 54.	nd 1000.4	.29 25.	1.14 305.	nd	nd	nd	.022	.071
13:49-14:49	- 19.6	1.40 54.	nd 1000.3	.29 25.	1.14 305.	nd	nd	nd	.022	.071
13:59-14:59	.6 19.7	1.38 53.	nd 1000.1	.28 23.	1.12 301.	nd	nd	nd	.023	.073
14:09-15:09	.6 19.9	1.37 52.	nd 999.8	.29 22.	1.11 303.	nd	nd	nd	.023	.072

LONDON\_B4 : 041A

Page: 0002

Time	CO Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Spd	Methane Wind-Dir	NOx	NO2	NO	Ozone	SolarRad
14:19-15:19	.6 20.0	1.39 51.	nd 999.6	.30 22.	1.11 303.	nd	nd	nd	.023	.071
14:29-15:29	.6 20.2	1.39 51.	nd 999.3	.31 22.	1.10 304.	nd	nd	nd	.023	.072
14:39-15:39	.7 20.2	1.41 50.	nd 999.1	.33 21.	1.11 310.	nd	nd	nd	.023	.066
14:49-15:49	.7 19.7	1.40 52.	nd 998.9	.33 20.	1.10 316.	nd	nd	nd	.022	.058
14:59-15:59	.7 19.4	1.41 55.	nd 998.8	.34 21.	1.10 326.	.01	nd	nd	.020	.054

LONDON, BA : 041A

Page: 0003

Statistics	CO Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Spd	Methane Wind-Dir	NOx	NO2	NO	Ozone	SolarRad
Units	ppm d C	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ppm	ppm	ppm	W/cm <sup>2</sup>
Arith. Mean	.67 19.4	1.375 56.3	.009 1000.7	.283 -	1.122 -	.009	.006	.007	.021	.0658
Std. Dev.	.13 1.1	.073 5.0	.009 3.7	.060 -	.039 -	.014	.003	.019	.004	.0261
Geo. Mean	.66 -	1.373 -	.007 -	.276 -	1.122 -	.007	.006	.005	.020	-
Geo. Std. Dev	1.22 -	1.054 -	1.794 -	1.270 -	1.035 -	1.779	1.374	1.523	1.322	-
Min Reading	.25 11.0	1.201 47.9	.005 980.8	.113 4.8	1.028 1.4	.005	.005	.005	.002	.0159
Max Reading	1.30 21.3	1.575 68.1	.078 1021.4	.467 39.3	1.254 356.4	.150	.018	.214	.028	.1022
Min Average	.60 19.8	1.296 50.4	.005 998.8	.208 14.8	1.100 298.7	.005	.005	.005	.019	.0543
Max Average	.75 20.2	1.423 61.0	.018 1001.0	.340 26.6	1.148 325.3	.015	.008	.015	.023	.0781
# Valid Rds	118. 240.	240. 240.	240. 240.	240. 240.	240. 240.	240.	240.	240.	240.	240.
Min. Det. Lev	.10 -	.100 -	.010 950.0	.100 -	.100 -	.010	.010	.010	.004	-
1 hr Crit.	30.00 -	- -	.250 -	- -	- -	-	.200	-	.080	-

- Invalid Data / Not Calculated

nd Average is less than Min. Detectable Level

m One or more readings Missing

# Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %

Averaging Started at Nearest: .0 min

LONDON, 84 : 042B

Start: 84/09/04 11:43 Scan: 60 sec  
Average: 60.00 min Report: 10.00 min  
Loc: THE BRISTOL APARTMENTS

Time	IRS Humidity	THC Barom	SO2 Wind-Spd	Non-CH4 Wind-Dir	Methane	Hg	T-abs-Hg	Ozone	SolarRad	Temp
11:43-12:43	nd -	1.18 1021.3	nd 5.	- 319.	-	.25	.00	.022	.075	18.8

LONDON, BA : 0428

Page: 0002

Statistics	TRS Humidity	THC Barom	SO2 Wind-Spd	Non-CH4 Wind-Dir	Methane	Hg	T-abs-Hg	Ozone	SolarRad	Temp
Units	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ug/m <sup>3</sup>	---	ppm	W/cm <sup>2</sup>	d C
Arith. Mean	.0018 -	1.185 1021.3	.009 -	- -	-	.254	.000	.022	.0752	18.8
Std. Dev.	.0014 -	.205 .1	.004 -	- -	-	.022	.000	.003	.0310	.8
Geo. Mean	.0014 -	1.168 -	.008 -	- -	-	.253	-	.021	-	-
Geo.Std.Dev	1.8212 -	1.185 -	1.569 -	- -	-	1.084	-	1.132	-	-
Min Reading	.0010 -	.825 1021.0	.005 1.0	- 15.7	-	.230	.000	.015	.0173	17.6
Max Reading	.0062 -	1.842 1021.5	.016 16.1	- 351.1	-	.340	.000	.028	.1093	20.4
Min Average	.0018 -	1.185 1021.3	.009 5.3	- 318.9	-	.254	.000	.022	.0752	18.8
Max Average	.0018 -	1.185 1021.3	.009 5.3	- 318.9	-	.254	.000	.022	.0752	18.8
# Valid Rds	60. 0.	60. 60.	60. 60.	0. 60.	0.	60.	60.	60.	60.	60.
Min.Det.Lev	.0020 -	.100 950.0	.010 -	.100 -	.100	.050	-	.004	-	-
1 hr Crit.	.0270 -	- -	.250 -	- -	-	-	-	.080	-	-

- Invalid Data / Not Calculated

nd Average is less than Min. Detectable Level

m One or more readings Missing

\* Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %

Averaging Started at Nearest: .0 min



## LONDON\_94 : 043B

Start: 84/09/04 12:48 Scan: 60 sec  
 Average: 60.00 min Report: 10.00 min  
 Loc: THE BRISTOL APARTMENTS

Time	CO T-abs-Hg	TRS Ozone	THC SolarRad	SO2 Temp	Non-CH4 Humidity	Methane Barom	NOx Wind-Spd	NO2 Wind-Dir	NO	Hg
12:48-13:48	1.8 .00	.004 .023	1.16 .081	nd 19.0	- -	- 1020.7	.03 9.	nd 305.	.03	.32
12:58-13:58	1.6 .00	.004 .023	1.09 .082	nd 19.1	- -	- 1020.7	.03 10.	nd 304.	.03	.33
13:08-14:08	1.9 .00	.005 .024	1.10 .088	nd 19.3	- -	- 1020.7	.04 10.	nd 303.	.04	.33
13:18-14:18	2.2 .00	.005 .023	1.13 .091	nd 19.7	- -	- 1020.7	.05 10.	nd 304.	.06	.35
13:28-14:28	2.2 .00	.005 .023	1.13 .082	nd 19.7	- -	- 1020.8	.05 10.	nd 306.	.06	.37
13:38-14:38	2.1 .00	.005 .023	1.15 .083	nd 20.0	- -	- 1020.8	.06 9.	nd 312.	.06	.36
13:48-14:48	2.1 .00	.005 .022	1.16 .088	nd 20.1	- -	- 1020.8	.06 10.	nd 305.	.06	.37
13:58-14:58	2.2 .00	.005 .022	1.20 .087	nd 20.3	- -	- 1020.7	.06 9.	nd 302.	.06	.37
14:08-15:08	2.3 .00	.005 .022	1.24 .084	nd 20.4	- -	- 1020.7	.06 9.	nd 303.	.06	.37
14:18-15:18	2.1 .00	.004 .023	1.19 .083	nd 20.5	- -	- 1020.6	.04 9.	nd 306.	.05	.36
14:28-15:28	2.2 .00	.005 .024	1.24 .083	nd 20.8	- -	- 1020.6	.06 8.	nd 307.	.06	.36
14:38-15:38	2.2 .00	.005 .023	1.25 .074	nd 20.6	- -	- 1020.5	.06 7.	nd 309.	.06	.36
14:48-15:48	2.3 .00	.005 .023	1.26 .066	nd 20.6	- -	- 1020.5	.06 6.	nd 319.	.06	.36

LONDON\_94 : 0438

Page: 0002

Statistics	CO T-abs-Hg	TRS Ozone	THC SolarRad	SO2 Temp	Non-CH4 Humidity	Methane Barom	NOx Wind-Spd	NO2 Wind-Dir	NO	Hg
Units	ppm ---	ppm ppm	ppm W/cm^2	ppm d C	ppm %-rel.	ppm mbar-msl	ppm km/h	ppm deg	ppm	ug/m^3
Arith. Mean	2.04 .000	.0048 .023	1.195 .0785	.005 19.9	- -	- 1020.7	.051 -	.005 -	.055	.348
Std. Dev.	2.12 .000	.0026 .004	.401 .0297	.000 1.0	- -	- .1	.074 -	.003 -	.076	.086
Geo. Mean	1.60 -	.0040 .023	1.147 -	.005 -	- -	- -	.021 -	.005 -	.026	.338
Geo.Std.Dev	1.84 -	1.9228 1.166	1.312 -	1.053 -	- -	- -	3.809 -	1.268 -	3.385	1.256
Min Reading	.72 .000	.0010 .013	.791 .0161	.005 18.0	- -	- 1020.3	.005 1.5	.005 .5	.005	.246
Max Reading	17.22 .000	.0135 .049	3.998 .1150	.010 21.9	- -	- 1020.9	.420 23.0	.029 359.9	.442	.725
Min Average	1.64 .000	.0042 .022	1.091 .0659	.005 19.0	- -	- 1020.5	.027 6.1	.005 301.9	.030	.321
Max Average	2.30 .000	.0053 .024	1.265 .0910	.005 20.8	- -	- 1020.8	.060 10.1	.006 318.9	.065	.370
# Valid Rds	183. 183.	183. 183.	183. 183.	183. 183.	0. 0.	0. 183.	183. 183.	183. 183.	183.	183.
Min.Det.Lev	.10 -	.0020 .004	.100 -	.010 -	.100 -	.100 950.0	.010 -	.010 -	.010	.050
1 hr Crit.	30.00 -	.0270 .080	- -	.250 -	- -	- -	- -	.200 -	-	-

- Invalid Data / Not Calculated  
nd Average is less than Min. Detectable Level  
m One or more readings Missing  
# Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %  
Averaging Started at Nearest: .0 min

LONDON\_B4 : 052A

Start: 04/09/05 11:03 Scan: 60 sec  
 Average: 60.00 min Report: 10.00 min  
 Loc: #2 BALL DIAMOND AT WCW

Time	CO Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Spd	Methane Wind-Dir	NOx	NO2	NO	Ozone	SolarRad
11:03-12:03	.4 16.2	1.12 55.	nd 1006.1	nd 17.	1.05 6.	.02	.02	nd	.027	.057
11:13-12:13	.4 16.3	1.11 54.	nd 1006.1	nd 16.	1.04 8.	.02	.02	nd	.028	.060
11:23-12:23	.4 16.7	1.09 52.	nd 1006.1	nd 17.	1.03 5.	.02	.02	nd	.028	.067
11:33-12:33	.4 17.0	1.10 51.	nd 1006.1	nd 17.	1.04 8.	.02	.02	nd	.029	.075
11:43-12:43	.5 17.5	1.13 49.	nd 1006.1	nd 17.	1.06 9.	.02	.02	nd	.030	.079
11:53-12:53	.5 17.6	1.12 49.	nd 1006.0	nd 16.	1.06 9.	.02	.02	nd	.030	.076
12:03-13:03	.4 17.7	1.13 49.	nd 1006.0	nd 16.	1.07 9.	.02	.02	nd	.031	.076
12:13-13:13	.4 17.9	1.14 47.	nd 1006.0	nd 16.	1.07 8.	.02	.02	nd	.031	.075
12:23-13:23	.4 17.9	1.17 46.	nd 1005.9	nd 15.	1.08 8.	.02	.02	nd	.032	.072
12:33-13:33	.4 17.8	1.17 46.	nd 1005.9	nd 14.	1.09 3.	.02	.02	nd	.033	.063
12:43-13:43	.4 17.6	1.17 46.	nd 1005.9	nd 15.	1.09 2.	.02	.02	nd	.033	.063
12:53-13:53	.4 17.6	1.17 46.	nd 1005.8	nd 15.	1.09 3.	.02	.02	nd	.034	.062

LONDON\_84 : 052A

Page: 0002

Statistics	CO Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Spd	Methane Wind-Dir	NOx	NO2	NO	Ozone	SolarRad
Units	ppm d C	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ppm	ppm	ppm	W/cm^2
Arith. Mean	.43 17.2	1.137 49.4	.005 1006.0	.079 -	1.067 -	.024	.023	.005	.031	.0654
Std. Dev.	.40 1.0	.098 4.7	.000 .1	.064 -	.081 -	.004	.001	.003	.004	.0283
Geo. Mean	.35 -	1.133 -	.005 -	.065 -	1.064 -	.024	.023	.005	.030	-
Geo.Std.Dev	1.83 -	1.084 -	1.000 -	1.700 -	1.077 -	1.145	1.051	1.265	1.126	-
Min Reading	.05 15.2	.951 43.4	.005 1005.7	.050 3.3	.762 .7	.020	.020	.005	.021	.0141
Max Reading	3.53 19.1	1.484 59.6	.005 1006.2	.405 28.6	1.367 359.8	.060	.026	.036	.040	.0978
Min Average	.35 16.2	1.093 45.8	.005 1005.8	.055 14.2	1.034 2.5	.023	.022	.005	.027	.0570
Max Average	.51 17.9	1.170 54.8	.005 1006.1	.090 17.0	1.089 9.3	.025	.023	.006	.034	.0791
# Valid Rds	177. 177.	177. 177.	177. 177.	177. 177.	177. 177.	177.	177.	177.	177.	177.
Min.Det.Lev	.10 -	.100 -	.010 950.0	.100 -	.100 -	.010	.010	.010	.004	-
1 hr Drit.	30.00 -	- -	.250 -	- -	- -	-	.200	-	.080	-

- Invalid Data / Not Calculated
- nd Average is less than Min. Detectable Level
- m One or more readings Missing
- # Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %  
Averaging Started at Nearest: .0 min

LONDON\_84 : 0528

Start: 84/07/05 10:55 Scan: 60 sec  
 Average: 60.00 min Report: 10.00 min  
 Loc: PARKWOOD HOSPITAL(S SIDE)

Time	CO T-abs-Hq	TRS Ozone	THC SolarRad	SO2 Temp	Non-CH4 Humidity	Methane Barom	NOx Wind-Spd	NO2 Wind-Dir	NO	Hg
10:55-11:55	.2 -	.003 .027	1.33 .077	nd 17.3	.55 -	.93 1025.9	.01 13.	.02 19.	nd	-
11:05-12:05	.2 -	.003 .028	1.35 .082	nd 17.6	.56 -	.92 1025.9	.01 14.	.02 21.	nd	-
11:15-12:15	.2 -	.003 .028	1.35 .084	nd 17.8	.56 -	.92 1025.9	.01 14.	.02 20.	nd	-
11:25-12:25	.2 -	.003 .029	1.35 .093	nd 18.0	.57 -	.91 1025.9	nd 14.	.02 25.	nd	-
11:35-12:35	.2 -	.003 .029	1.32 .098	nd 18.4	.55 -	.91 1026.0	nd 13.	.02 26.	nd	-
11:45-12:45	.2 -	.003 .029	1.26 .093	nd 18.3	.49 -	.91 1026.0	nd 13.	.02 20.	nd	-
11:55-12:55	.2 -	.003 .029	1.24 .096	nd 18.3	.48 -	.90 1026.0	.01 13.	.02 20.	nd	-
12:05-13:05	.2 -	.003 .029	1.22 .091	nd 18.3	.47 -	.90 1026.0	.01 12.	.02 19.	nd	-
12:15-13:15	.2 -	.003 .029	1.21 .091	nd 18.3	.46 -	.90 1026.0	.01 12.	.02 18.	nd	-
12:25-13:25	.2 -	.003 .029	1.20 .087	nd 18.4	.45 55.	.90 1025.9	.01 11.	.02 13.	nd	-
12:35-13:35	.2 -	.003 .029	1.19 .083	nd 18.3	.45 54.	.89 1025.9	.02 12.	.02 13.	nd	-
12:45-13:45	.2 -	.003 .029	1.21 .082	nd 18.5	.46 53.	.89 1025.9	.01 11.	.02 20.	nd	-
12:55-13:55	.2 -	.003 .029	1.24 .075	nd 18.5	.48 51.	.89 1025.8	.01 11.	.02 22.	nd	-

LONDON\_84 : 052P

Page: 0002

Statistics	CO T-abs-Hg	TRS Ozone	THC SolarRad	SO2 Temp	Non-CH4 Humidity	Methane Barom	NOx Wind-Spd	NO2 Wind-Dir	NO	Hg
Units	ppm ---	ppm ppm	ppm W/cm^2	ppm d C	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ug/m^3
Arith. Mean	.19 -	.0030 .028	1.269 .0831	.006 18.1	.503 52.7	.907 1025.9	.013 -	.017 -	.005	-
Std. Dev.	.18 -	.0022 .003	.145 .0329	.002 .8	.123 3.4	.016 .1	.009 -	.004 -	.002	-
Geo. Mean	.15 -	.0023 .028	1.261 -	.006 -	.491 -	.907 -	.010 -	.017 -	.005	-
Geo.Std.Dev	1.89 -	2.1282 1.138	1.112 -	1.323 -	1.240 -	1.018 -	1.912 -	1.288 -	1.185	-
Min Reading	.05 -	.0010 .017	1.097 .0175	.005 15.9	.364 45.8	.883 1025.6	.005 .9	.005 .4	.005	-
Max Reading	1.79 -	.0102 .036	1.862 .1203	.015 19.6	1.012 60.1	.955 1026.1	.065 23.9	.037 359.6	.030	-
Min Average	.16 -	.0026 .027	1.194 .0746	.005 17.3	.447 51.4	.893 1025.8	.009 11.2	.015 13.2	.005	-
Max Average	.24 -	.0033 .029	1.352 .0976	.007 18.5	.571 54.6	.927 1026.0	.015 13.7	.018 25.7	.005	-
# Valid Rds	185. 0.	185. 185.	185. 185.	185. 185.	185. 86.	185. 185.	185. 185.	185. 185.	185.	0.
Min.Det.Lev	.10 -	.0020 .004	.100 -	.010 -	.100 -	.100 950.0	.010 -	.010 -	.010	.050
1 hr Crit.	30.00 -	.0270 .080	- -	.250 -	- -	- -	- -	.200 -	-	-

- Invalid Data / Not Calculated

nd Average is less than Min. Detectable Level

m One or more readings Missing

\* Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %

Averaging Started at Nearest: .0 min

## LONDON\_B4 : 053A

Start: 84/09/05 14:42 Scan: 60 sec  
 Average: 60.00 min Report: 10.00 min  
 Loc: SUTTON FARM'S APPLE ORCHARD

Time	CO Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Spd	Methane Wind-Dir	NOx	NO2	NO	Ozone	SolarRad
14:42-15:42	.7 17.2	1.16 49.	nd 1005.7	.12 19.	1.03 3.	.04	.03	.01	.028	.063
14:52-15:52	.7 17.2	1.17 50.	nd 1005.6	.13 17.	1.03 3.	.04	.03	.01	.027	.061
15:02-16:02	.8 17.6	1.17 49.	nd 1005.6	.13 16.	1.03 359.	.04	.03	.02	.027	.065
15:12-16:12	.9 18.1	1.18 49.	nd 1005.5	.14 16.	1.03 355.	.04	.03	.02	.027	.063
15:22-16:22	1.2 18.1	1.22 49.	nd 1005.4	.17 15.	1.03 352.	.05	.03	.03	.027	.056
15:32-16:32	1.3 18.3	1.24 49.	nd 1005.3	.19 14.	1.04 346.	.06	.03	.03	.027	.052
15:42-16:42	1.4 18.7	1.26 49.	nd 1005.2	.22 14.	1.04 338.	.06	.03	.04	.027	.050
15:52-16:52	1.4 18.6	1.26 48.	nd 1005.2	.22 14.	1.04 335.	.07	.03	.04	.027	.048

LONDON\_B4 : 053A

Page: 0002

Statistics	CO Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Spd	Methane Wind-Dir	NOx	NO2	NO	Ozone	SolarRad
Units	ppm d C	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ppm	ppm	ppm	W/cm^2
Arith. Mean	1.06 17.9	1.209 49.1	.005 1005.5	.168 -	1.034 -	.051	.027	.025	.027	.0554
Std. Dev.	.82 1.2	.151 2.4	.000 .3	.149 -	.009 -	.026	.003	.024	.002	.0218
Geo. Mean	.84 -	1.201 -	.005 -	.127 -	1.034 -	.047	.027	.017	.027	-
Geo.Std.Dev	1.94 -	1.116 -	1.000 -	2.084 -	1.009 -	1.517	1.121	2.418	1.095	-
Min Reading	.05 15.9	1.088 43.9	.005 1005.1	.050 2.9	1.013 1.1	.025	.022	.005	.020	.0123
Max Reading	4.46 21.2	1.908 53.1	.005 1005.9	.840 30.9	1.077 359.9	.162	.039	.129	.034	.0986
Min Average	.70 17.2	1.160 48.2	.005 1005.2	.120 14.0	1.031 2.8	.038	.026	.013	.027	.0475
Max Average	1.45 18.7	1.264 49.6	.005 1005.7	.222 18.8	1.038 359.4	.066	.029	.039	.028	.0645
# Valid Rds	130. 130.	130. 130.	130. 130.	130. 130.	130. 130.	130.	130.	130.	130.	130.
Min.Det.Lev	.10 -	.100 -	.010 950.0	.100 -	.100 -	.010	.010	.010	.004	-
1 hr Crit.	30.00 -	- -	.250 -	- -	- -	-	.200	-	.080	-

- Invalid Data / Not Calculated

nd Average is less than Min. Detectable Level

m One or more readings Missing

# Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %

Averaging Started at Nearest: .0 min



LONDON\_84 : 0538

Start: 84/09/05 14:35 Scan: 60 sec  
 Average: 60.00 min Report: 10.00 min  
 Loc: RADIO TOWER ON HWY 135

Time	CO T-abs-Hq	TRS Ozone	THC SolarRad	SO2 Temp	Non-CH4 Humidity	Methane Barom	NOx Wind-Spd	NO2 Wind-Dir	NO	Hg
14:35-15:35	nd -	.004 .028	1.20 .097	nd 19.9	.42 49.	.94 1027.9	nd 18.	.01 20.	nd	-
14:45-15:45	nd -	.004 .029	1.23 .093	nd 20.0	.44 48.	.94 1027.9	nd 17.	.01 17.	nd	-
14:55-15:55	nd -	.004 .028	1.25 .089	nd 20.1	.46 48.	.94 1027.8	nd 16.	.01 16.	nd	-
15:05-16:05	nd -	.005 .028	1.27 .087	nd 19.9	.48 49.	.94 1027.7	nd 15.	.01 13.	nd	-
15:15-16:15	nd -	.005 .029	1.29 .082	nd 19.7	.50 49.	.94 1027.7	nd 15.	.01 14.	nd	-
15:25-16:25	nd -	.004 .028	1.32 .070	nd 19.4	.53 51.	.94 1027.7	nd 15.	.01 11.	nd	-
15:35-16:35	nd -	.005 .028	1.36 .060	nd 18.8	.56 52.	.94 1027.6	nd 13.	.01 8.	nd	-

LONDON, GA : 9538

Page: 0002

Statistics	CO T-abs-Hq	TRS Ozone	THC SolarRad	SO2 Temp	Non-CH4 Humidity	Methane Barom	NOx Wind-Spd	NO2 Wind-Dir	NO	Hq
Units	ppm ---	ppm ppm	ppm W/cm^2	ppm d C	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ug/m^3
Arith. Mean	.08 -	.0042 .028	1.282 .0785	.005 19.4	.492 50.8	.938 1027.8	.006 -	.014 -	.005	-
Std. Dev.	.07 -	.0024 .002	.096 .0302	.001 1.1	.080 3.4	.005 .2	.004 -	.003 -	.001	-
Geo. Mean	.07 -	.0034 .028	1.279 -	.005 -	.486 -	.938 -	.006 -	.013 -	.005	-
Geo.Std.Dev	1.71 -	2.0812 1.092	1.077 -	1.070 -	1.176 -	1.005 -	1.442 -	1.337 -	1.124	-
Min Reading	.05 -	.0010 .020	1.132 .0134	.005 16.5	.368 45.1	.927 1027.5	.005 6.8	.005 .4	.005	-
Max Reading	.51 -	.0109 .034	1.503 .1163	.011 20.9	.674 58.2	.950 1028.1	.034 26.0	.023 358.9	.013	-
Min Average	.07 -	.0037 .028	1.201 .0600	.005 18.8	.424 48.4	.937 1027.6	.005 13.5	.013 8.1	.005	-
Max Average	.09 -	.0049 .029	1.357 .0972	.005 20.1	.556 52.2	.940 1027.9	.007 18.2	.014 19.5	.005	-
# Valid Rds	122. 0.	122. 122.	122. 122.	122. 122.	122. 122.	122. 122.	122. 122.	122. 122.	122.	0.
Min.Det.Lev	.10 -	.0020 .004	.100 -	.010 -	.100 -	.100 950.0	.010 -	.010 -	.010	.050
1 hr Crit.	30.00 -	.0270 .080	- -	.250 -	- -	- -	- -	.200 -	-	-

- Invalid Data / Not Calculated  
nd Average is less than Min. Detectable Level  
m One or more readings Missing  
# Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %  
Averaging Started at Nearest: .0 min

LONDON\_84 : 0638

Start: 84/09/06 14:59 Scan: 60 sec  
 Average: 60.00 min Report: 10.00 min  
 Loc: ST SEBASTIAN SEPARATE SCHOOL

Time	CO SolarRad	TRS Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Spd	Methane Wind-Dir	NOx	NO2	NO	Ozone
14:59-15:59	.5 .060	nd 21.1	1.04 44.	nd 1028.6	.38 6.	.73 222.	.01	.01	nd	.036
15:09-16:09	.5 .066	.002 21.6	1.03 43.	nd 1028.5	.37 6.	.72 233.	.01	.01	nd	.035
15:19-16:19	.5 .073	nd 21.9	1.01 42.	nd 1028.4	.35 6.	.72 239.	.01	.01	nd	.035
15:29-16:29	.5 .070	nd 22.2	1.02 42.	nd 1028.4	.37 6.	.71 242.	.02	.01	.01	.034
15:39-16:39	.6 .071	.003 22.4	.99 41.	nd 1028.3	.34 7.	.72 240.	.02	.01	.01	.034
15:49-16:49	.6 .071	.003 22.6	.99 42.	nd 1028.3	.33 8.	.72 233.	.02	.01	.01	.034
15:59-16:59	.5 .066	.003 22.4	1.00 43.	nd 1028.2	.33 9.	.72 229.	.01	.01	nd	.033

LONDON\_64 : 063B

Page: 0002

Statistics	CO SolarRad	TRS Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Spd	Methane Wind-Dir	NOx	NO2	NO	Ozone
Units	ppm W/cm^2	ppm d C	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ppm	ppm	ppm
Arith. Mean	.50 .0627	.0025 21.7	1.019 43.5	.005 1028.4	.357 -	.725 -	.013	.011	.008	.034
Std. Dev.	.44 .0255	.0021 1.1	.289 2.7	.000 .2	.266 -	.022 -	.021	.005	.020	.003
Geo. Mean	.45 -	.0019 -	.994 -	.005 -	.317 -	.725 -	.009	.010	.006	.034
Geo.Std.Dev	1.47 -	2.1288 -	1.221 -	1.000 -	1.517 -	1.030 -	2.014	1.636	1.660	1.097
Min Reading	.30 .0214	.0010 19.6	.788 37.3	.005 1028.0	.164 2.0	.698 174.0	.005	.005	.005	.027
Max Reading	4.29 .1050	.0083 24.4	3.063 49.3	.005 1028.8	2.274 16.2	.822 307.6	.208	.032	.212	.041
Min Average	.50 .0596	.0018 21.1	.987 41.5	.005 1028.2	.329 5.9	.713 222.5	.013	.011	.007	.033
Max Average	.56 .0725	.0032 22.6	1.041 44.1	.005 1028.6	.379 8.9	.725 242.4	.016	.012	.011	.036
# Valid Rds	122. 122.	122. 122.	122. 122.	122. 122.	122. 122.	122. 122.	122.	122.	122.	122.
Min.Det.Lev	.10 -	.0020 -	.100 -	.010 950.0	.100 -	.100 -	.010	.010	.010	.004
1 hr Crit.	30.00 -	.0270 -	- -	.250 -	- -	- -	-	.200	-	.080

- Invalid Data / Not Calculated

nd Average is less than Min. Detectable Level

m One or more readings Missing

\* Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %

Averaging Started at Nearest: .0 min

LONDON\_84 : 064A

Start: 84/09/06 15:13 Scan: 60 sec  
 Average: 60.00 min Report: 10.00 min  
 Loc: SCHOOL @ CHESTERFIELD & THOMPSON

Time	CO Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Spd	Methane Wind-Dir	NOx	NO2	NO	Ozone	SolarRad
15:13-15:13	1.3 21.7	1.16 40.	nd 1009.7	.23 4.	.93 221.	.02	.01	.01	.029	.057
15:23-15:23	1.8 22.1	1.18 39.	nd 1009.5	.25 4.	.92 224.	.02	.01	.01	.028	.055

LONDON\_84 : 064A

Page: 0002

Statistics	CO Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Spd	Methane Wind-Dir	NOx	NO2	NO	Ozone	SolarRad
Units	ppm d C	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ppm	ppm	ppm	W/cm <sup>2</sup>
Arith. Mean	1.55 21.7	1.174 40.0	.009 1009.5	.244 -	.925 -	.027	.013	.014	.028	.0499
Std. Dev.	1.80 1.5	.180 2.9	.004 .5	.179 -	.014 -	.020	.007	.013	.005	.0255
Geo. Mean	.92 -	1.163 -	.008 -	.206 -	.925 -	.019	.011	.010	.028	-
Geo.Std.Dev	2.86 -	1.138 -	1.626 -	1.761 -	1.015 -	2.375	1.862	2.263	1.205	-
Min Reading	.05 19.1	1.003 35.4	.005 1008.8	.050 .0	.906 43.8	.005	.005	.005	.015	.0146
Max Reading	9.84 24.0	2.216 46.3	.016 1010.2	1.319 17.9	.970 317.0	.076	.027	.051	.036	.0827
Min Average	1.29 21.7	1.162 39.3	.008 1009.5	.231 3.5	.923 221.0	.023	.012	.012	.028	.0550
Max Average	1.77 22.1	1.180 40.1	.010 1009.7	.252 3.6	.926 223.6	.024	.013	.012	.029	.0567
# Valid Rds	76. 76.	76. 76.	76. 76.	76. 76.	76. 76.	76.	76.	76.	76.	76.
Min.Det.Lev	.10 -	.100 -	.010 950.0	.100 -	.100 -	.010	.010	.010	.004	-
1 hr Crit.	30.00 -	- -	.250 -	- -	- -	-	.200	-	.080	-

- Invalid Data / Not Calculated

nd Average is less than Min. Detectable Level

m One or more readings Missing

# Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %

Averaging Started at Nearest: .0 min

LONDON\_84 : 0718

Start: 84/09/07 10:35 Scan: 60 sec  
 Average: 60.00 min Report: 10.00 min  
 Loc: ROWNTREE PARK 1 KM NW EFW

Time	CO SolarRad	TRS Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Spd	Methane Wind-Dir	NOx	NO2	NO	Ozone
10:35-11:35	.6 .066	.003 21.7	1.27 56.	.04 1031.6	.43 16.	.91 179.	.04	.03	nd	.024
10:45-11:45	.6 .063	.002 21.7	1.25 55.	.04 1031.6	.43 15.	.91 181.	.05	.03	.01	.023

LONDON\_B4 : 071B

Page: 0002

Statistics	CO SolarRad	TRE Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Spd	Methane Wind-Dir	NOx	NO2	NO	Ozone
Units	ppm W/cm <sup>2</sup>	ppm d C	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ppm	ppm	ppm
Arith. Mean	.62 .0620	.0030 21.6	1.264 55.9	.042 1031.6	.430 -	.910 -	.046	.034	.011	.023
Std. Dev.	.13 .0116	.0023 .3	.058 1.9	.009 .1	.037 -	.014 -	.010	.005	.006	.003
Geo. Mean	.62 -	.0022 -	1.262 -	.041 -	.429 -	.910 -	.045	.034	.009	.023
Geo.Std.Dev	1.15 -	2.1907 -	1.044 -	1.269 -	1.086 -	1.015 -	1.234	1.170	1.814	1.158
Min Reading	.50 .0422	.0010 21.1	1.186 53.3	.017 1031.2	.368 8.3	.897 159.2	.032	.026	.005	.017
Max Reading	1.61 .0858	.0086 22.4	1.631 61.0	.068 1031.8	.595 23.4	.995 211.6	.071	.048	.023	.029
Min Average	.62 .0635	.0025 21.7	1.254 55.5	.040 1031.6	.426 15.3	.906 179.0	.044	.033	.010	.023
Max Average	.63 .0660	.0030 21.7	1.265 56.3	.043 1031.6	.434 15.7	.909 181.1	.046	.034	.011	.024
# Valid Rds	75. 75.	75. 75.	75. 75.	75. 75.	75. 75.	75. 75.	75.	75.	75.	75.
Min.Det.Lev	.10 -	.0020 -	.100 -	.010 950.0	.100 -	.100 -	.010	.010	.010	.004
1 hr Crit.	30.00 -	.0270 -	- -	.250 -	- -	- -	-	.200	-	.080

- Invalid Data / Not Calculated

nd Average is less than Min. Detectable Level

m One or more readings Missing

# Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %

Averaging Started at Nearest: .0 min



LONDON\_B4 : 072A

Start: 04/09/07 10:41 Scan: 60 sec  
 Average: 60.00 min Report: 10.00 min  
 Loc: G.A. WHEABLE S. SCHOOL N THOMPSON

Time	CO Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Spd	Methane Wind-Dir	NOx	NO2	NO	Ozone	SolarRad
10:41-11:41	.4 22.0	1.38 50.	.04 1010.7	.24 19.	1.16 196.	.02	nd	nd	.016	.059
10:51-11:51	.4 22.0	1.37 49.	.04 1010.6	.17 20.	1.23 197.	.02	nd	nd	.014	.055
11:01-12:01	.4 21.8	1.37 49.	.04 1010.4	.12 20.	1.29 198.	.02	nd	nd	.014	.053
11:11-12:11	.4 21.6	1.37 49.	.04 1010.3	.11 20.	1.29 198.	.02	nd	nd	.014	.049
11:21-12:21	.4 21.3	1.38 49.	.04 1010.1	.16 21.	1.24 199.	.02	nd	nd	.014	.046
11:31-12:31	.4 21.1	1.39 49.	.04 1010.0	.21 21.	1.19 198.	.02	nd	nd	.014	.045

LONDON 84 : 072A

Page: 0002

Statistics	CO Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Std	Methane Wind-Dir	NOx	NO2	NO	Ozone	SolarRad
Units	ppm d C	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ppm	ppm	ppm	W/cm <sup>2</sup>
Arith. Mean	.41 21.6	1.388 49.3	.039 1010.3	.252 -	1.156 -	.019	.007	.008	.015	.0532
Std. Dev.	.13 .6	.038 1.1	.008 .5	.180 -	.177 -	.005	.004	.004	.004	.0110
Geo. Mean	.39 -	1.388 -	.038 -	.166 -	1.143 -	.018	.007	.007	.015	-
Geo. Std. Dev	1.38 -	1.028 -	1.265 -	2.787 -	1.166 -	1.352	1.541	1.549	1.318	-
Min Reading	.10 20.8	1.325 48.1	.015 1009.1	.050 8.4	.920 162.4	.005	.005	.005	.008	.0363
Max Reading	1.03 22.9	1.537 53.0	.053 1011.2	.575 33.8	1.388 245.7	.031	.015	.018	.028	.0761
Min Average	.39 21.1	1.369 48.8	.037 1010.0	.113 19.2	1.162 196.5	.019	.008	.008	.014	.0451
Max Average	.44 22.0	1.387 49.6	.043 1010.7	.244 21.0	1.289 199.4	.021	.009	.009	.016	.0593
# Valid Rds	118. 118.	118. 118.	118. 118.	118. 118.	118. 118.	118.	118.	118.	118.	118.
Min. Det. Lev	.10 -	.100 -	.010 950.0	.100 -	.100 -	.010	.010	.010	.004	-
1 hr Crit.	30.00 -	- -	.250 -	- -	- -	-	.200	-	.080	-

- Invalid Data / Not Calculated

nd Average is less than Min. Detectable Level

m One or more readings Missing

# Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %

Averaging Started at Nearest: .0 min

LONDON\_84 : 271A

Start: 84/08/27 16:41      Scan:      60 sec  
Average: 60.00 min      Report: 10.00 min  
Loc: C.C. CARROTHERS SCHOOL @ Chippendale & King Edward

Time	SolarRad	Temp	Humidity	Barom	Wind-Spd	Wind-Dir
16:41-17:41	.034	25.0	55.	1065.5	31.	222.
16:51-17:51	.035	25.1	55.	1065.4	32.	223.

LONDON 84 : 271A

Page: 0002

Statistics	SolarRad	Temp	Humidity	Barom	Wind-Spd	Wind-Dir
Units	W/cm*2	d C	%-rel	mbar-msl	km/h	deg
Arith. Mean	.0325	25.1	54.8	1065.5	-	-
Std. Dev.	.0105	.4	1.6	.2	-	-
Min Reading	.0157	24.3	52.3	1065.2	18.0	194.4
Max Reading	.0564	25.8	57.1	1065.9	47.4	242.2
Min Average	.0342	25.0	54.7	1065.4	31.1	222.3
Max Average	.0349	25.1	55.3	1065.5	31.8	223.3
# Valid Rds	77.	77.	77.	77.	77.	77.
Min.Det.Lev	-	-	-	950.0	-	-

- Invalid Data / Not Calculated

nd Average is less than Min. Detectable Level

m One or more readings Missing

‡ Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %

Averaging Started at Nearest: .0 min

LONDON\_84 : 271B

Start: 84/08/27 16:49      Scan:      60 sec  
Average: 60.00 min      Report: 10.00 min  
Loc: PARKWOOD HOSP - S SIDE

Time	CO Barom	TRS Wind-Spd	THC Wind-Dir	SO2	Non-CH4	Methane	Ozone	SolarRad	Temp	Humidity
16:49-17:49	.7 1015.8	.002 21.	1.23 198.	nd	.37	1.10	.069	.041	27.5	58.

LONDON\_84 : 2718

Page: 0002

Statistics	CO Barom	TRS Wind-Spd	THC Wind-Dir	SO2	Non-CH4	Methane	Ozone	SolarRad	Temp	Humidity
Units	ppm mbar-msl	ppm km/h	ppm deg	ppm	ppm	ppm	ppm	W/cm <sup>2</sup>	d C	%-rel
Arith. Mean	.76 1015.8	.0021 -	1.229 -	.007	.364	1.103	.069	.0412	27.5	57.8
Std. Dev.	.16 .1	.0023 -	.154 -	.003	.122	.014	.003	.0122	.7	2.5
Geo. Mean	.75 -	.0015 -	1.219 -	.007	.343	1.103	.069	-	-	-
Geo.Std.Dev	1.17 -	2.1100 -	1.133 -	1.494	1.411	1.013	1.051	-	-	-
Min Reading	.58 1015.6	.0010 10.9	1.018 178.1	.005	.198	1.074	.060	.0228	26.0	53.9
Max Reading	1.83 1015.9	.0109 28.3	1.566 223.6	.012	.642	1.124	.075	.0627	28.7	63.3
Min Average	.74 1015.8	.0021 20.6	1.232 197.8	.007	.366	1.104	.069	.0413	27.5	57.9
Max Average	.74 1015.8	.0021 20.6	1.232 197.8	.007	.366	1.104	.069	.0413	27.5	57.9
# Valid Rdgs	61. 61.	61. 61.	61. 61.	61.	61.	61.	61.	61.	61.	61.
Min.Det.Lev	.10 950.0	.0020 -	.100 -	.010	.100	.100	.004	-	-	-
1 hr Crit.	30.00 -	.0270 -	- -	.250	-	-	.080	-	-	-

- Invalid Data / Not Calculated

nd Average is less than Min. Detectable Level

m One or more readings Missing

# Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %

Averaging Started at Nearest: .0 min

LONDON\_84 : 281A

Start: 84/08/28 14:47 Scan: 60 sec  
 Average: 60.00 min Report: 10.00 min  
 Loc: BOYS' CLUB @ ADELAIDE & SOUTHDAL

Time	THC Barom	SO2 Wind-Spd	Non-CH4 Wind-Dir	Methane	NOx	NO2	NO	SolarRad	Temp	Humidity
14:47-15:47	1.76 1072.1	nd 12.	.51 216.	1.29	nd	nd	nd	.027	27.1	63.
14:57-15:57	1.77 1072.0	nd 12.	.52 216.	1.28	nd	nd	nd	.017	26.4	65.
15:07-16:07	1.75 1071.9	nd 12.	.49 216.	1.29	nd	nd	nd	.015	25.9	66.
15:17-16:17	1.73 1071.9	nd 12.	.47 214.	1.29	.01	nd	nd	.012	25.5	67.
15:27-16:27	1.71 1071.7	nd 12.	.45 211.	1.30	.01	nd	nd	.008	25.1	68.
15:37-16:37	1.70 1071.5	nd 11.	.43 208.	1.30	.01	.01	nd	.007	24.7	69.
15:47-16:47	1.70 1071.3	nd 11.	.41 203.	1.32	.02	.01	nd	.006	24.4	70.

LONDON\_84 : 281A

Page: 0002

Statistics	THC Barom	SO2 Wind-Spd	Non-CH4 Wind-Dir	Methane	NOx	NO2	NO	SolarRad	Temp	Humidity
Units	ppm mbar-msl	ppm km/h	ppm deg	ppm	ppm	ppm	ppm	W/cm^2	d C	%-rel
Arith. Mean	1.728 1071.7	.005 -	.459 -	1.305	.011	.008	.005	.0162	25.7	67.0
Std. Dev.	.073 .5	.000 -	.085 -	.034	.007	.005	.000	.0173	1.7	4.3
Geo. Mean	1.726 -	.005 -	.451 -	1.304	.009	.007	.005	-	-	-
Geo.Std.Dev	1.043 -	1.000 -	1.204 -	1.026	1.849	1.662	1.000	-	-	-
Min Reading	1.603 1070.7	.005 4.3	.309 176.5	1.272	.005	.005	.005	.0055	23.3	58.0
Max Reading	1.904 1072.4	.005 23.6	.644 247.8	1.430	.030	.023	.005	.0747	29.5	75.9
Min Average	1.695 1071.3	.005 11.1	.411 203.1	1.285	.006	.005	.005	.0061	24.4	63.4
Max Average	1.768 1072.1	.005 12.5	.515 216.5	1.322	.016	.011	.005	.0265	27.1	70.4
# Valid Rdgs	121. 121.	121. 121.	121. 121.	121.	121.	121.	121.	121.	121.	121.
Min.Det.Lev	.100 950.0	.010 -	.100 -	.100	.010	.010	.010	-	-	-
1 hr Crit.	- -	.250 -	- -	-	-	.200	-	-	-	-

- Invalid Data / Not Calculated

nd Average is less than Min. Detectable Level

m One or more readings Missing

# Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %

Averaging Started at Nearest: .0 min



LONDON\_84 : 2838

Start: 84/08/28 15:10 Scan: 60 sec  
 Average: 60.00 min Report: 10.00 min  
 Loc: 6 A WHEABLE SECONDARY SCHOOL

Time	CO SolarRad	TRS Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Spd	Methane Wind-Dir	NOx	NO2	NO	Ozone
15:10-16:10	1.2 .016	.009 27.3	2.45 73.	.02 1014.0	1.57 6.	.84 192.	.03	.01	.02	.053
15:20-16:20	1.1 .013	.009 26.9	2.30 74.	.02 1014.1	1.44 6.	.84 188.	.03	.02	.02	.051
15:30-16:30	1.1 .011	.008 26.6	2.20 75.	.01 1014.1	1.35 6.	.83 187.	.03	.02	.02	.050
15:40-16:40	1.0 .010	.008 26.2	2.13 76.	.01 1014.1	1.29 7.	.83 183.	.03	.02	.01	.048
15:50-16:50	.9 .010	.007 25.9	2.08 77.	.01 1014.2	1.25 7.	.82 180.	.03	.02	.01	.047
16:00-17:00	.9 .010	.007 25.5	1.98 78.	.01 1014.2	1.18 7.	.82 174.	.03	.02	.01	.047

LONDON\_84 : 2838

Page: 0002

Statistics	CO SolarRad	TRS Temp	THC Humidity	SO2 Barom	Non-CH4 Wind-Spd	Methane Wind-Dir	NOx	NO2	NO	Ozone
Units	ppm W/cm <sup>2</sup>	ppm d C	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ppm	ppm	ppm
Arith. Mean	1.05 .0130	.0080 26.3	2.214 75.7	.016 1014.1	1.368 -	.829 -	.030	.017	.015	.051
Std. Dev.	.58 .0063	.0029 1.1	.575 3.8	.024 .1	.516 -	.017 -	.014	.009	.011	.006
Geo. Mean	.94 -	.0074 -	2.151 -	.011 -	1.291 -	.829 -	.027	.014	.013	.050
Geo.Std.Dev	1.50 -	1.5568 -	1.261 -	2.339 -	1.388 -	1.021 -	1.548	1.864	1.729	1.125
Min Reading	.59 .0071	.0010 24.4	1.571 69.0	.005 1013.9	.801 1.8	.803 149.0	.005	.005	.005	.038
Max Reading	4.45 .0361	.0158 28.2	4.199 84.1	.242 1014.3	3.338 15.5	.889 250.7	.112	.046	.097	.061
Min Average	.88 .0095	.0068 25.5	1.982 72.7	.010 1014.0	1.177 5.7	.816 174.3	.029	.014	.013	.047
Max Average	1.21 .0163	.0093 27.3	2.448 78.2	.021 1014.2	1.567 7.4	.837 191.8	.031	.020	.017	.053
# Valid Rds	115. 115.	115. 115.	115. 115.	115. 115.	115. 115.	115. 115.	115.	115.	115.	115.
Min.Det.Lev	.10 -	.0020 -	.100 -	.010 950.0	.100 -	.100 -	.010	.010	.010	.004
1 hr Crit.	30.00 -	.0270 -	- -	.250 -	- -	- -	-	.200	-	.080

- Invalid Data / Not Calculated

nd Average is less than Min. Detectable Level

m One or more readings Missing

\* Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %

Averaging Started at Nearest: .0 min

LONDON\_84 : 302A

Start: 84/08/30 14:51 Scan: 60 sec  
 Average: 60.00 min Report: 10.00 min  
 Loc: APT BLDG @ CRNR COMMISSIONERS & POND MILLS

Time	CO Humidity	THC Barom	SO2 Wind-Spd	Non-CH4 Wind-Dir	Methane	NOx	NO2	NO	SolarRad	Temp
14:51-15:51	.9 68.	1.44 1076.1	.03 17.	.25 289.	1.20	nd	nd	nd	-	25.1
15:01-16:01	1.3 66.	1.43 1076.0	.03 15.	.25 293.	1.19	nd	nd	nd	-	25.4
15:11-16:11	1.5 65.	1.39 1075.6	.03 14.	.22 296.	1.18	.01	nd	.01	-	25.6
15:21-16:21	1.6 64.	1.36 1075.5	.03 13.	.19 301.	1.17	.01	nd	.01	.057	25.9
15:31-16:31	1.9 64.	1.36 1075.3	.03 11.	.19 307.	1.17	.02	nd	.02	.054	25.9
15:41-16:41	2.0 63.	1.34 1075.2	.03 11.	.18 308.	1.17	.02	nd	.02	.056	26.0
15:51-16:51	1.9 63.	1.31 1075.1	.03 12.	.15 306.	1.17	.02	nd	.02	.053	26.0
16:01-17:01	1.9 63.	1.31 1075.0	.03 12.	.15 306.	1.17	.02	nd	.02	.050	25.8
16:11-17:11	2.0 63.	1.33 1075.2	.03 11.	.16 307.	1.17	.01	nd	.01	.048	25.7
16:21-17:21	2.0 63.	1.33 1075.1	.03 10.	.17 309.	1.17	.01	nd	.01	.048	25.7
16:31-17:31	1.7 62.	1.30 1075.0	.03 11.	.14 303.	1.17	.01	nd	.01	.048	25.8
16:41-17:41	1.6 61.	1.30 1074.9	.03 11.	.13 303.	1.18	.01	nd	.01	.044	25.8
16:51-17:51	1.7 61.	1.33 1074.8	.03 10.	.16 307.	1.18	.01	nd	.01	.041	25.8
17:01-18:01	1.5 60.	1.30 1074.8	.02 10.	.12 307.	1.18	nd	nd	nd	.037	25.7
17:11-18:11	1.3 60.	1.28 1074.7	.02 11.	.10 306.	1.17	nd	nd	nd	.034	25.4
17:21-18:21	1.4 60.	1.30 1074.7	.02 11.	.12 309.	1.17	nd	nd	nd	.031	25.1

LONDON\_84 : 002A

Page: 0002

Time	CO Humidity	THC Barom	SO2 Wind-Spd	Non-CH4 Wind-Dir	Methane	NOx	NO2	NO	SolarRad	Temp
17:31-18:31	1.5 61.	1.31 1074.7	.02 10.	.14 320.	1.18	nd	nd	nd	.027	24.7
17:41-18:41	1.6 61.	1.35 1074.7	.02 10.	.18 323.	1.18	nd	nd	nd	.024	24.3
17:51-18:51	1.5 62.	1.34 1074.7	.02 10.	.16 325.	1.18	nd	nd	nd	.020	23.8

LONDON\_B4 : 302A

Page: 0003

Statistics	CO Humidity	THC Barom	SO2 Wind-Spd	Non-CH4 Wind-Dir	Methane	NOx	NO2	NO	SolarRad	Temp
Units	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ppm	ppm	ppm	W/cm^2	d C
Arith. Mean	1.52 63.5	1.355 1075.2	.026 -	.179 -	1.181	.010	.005	.010	.0394	25.1
Std. Dev.	1.31 3.1	.161 .8	.002 -	.148 -	.021	.013	.001	.012	.0184	1.1
Geo. Mean	1.23 -	1.346 -	.025 -	.131 -	1.181	.007	.005	.007	-	-
Geo.Std.Dev	1.80 -	1.117 -	1.097 -	2.221 -	1.018	2.005	1.082	2.001	-	-
Min Reading	.58 58.2	1.147 1071.1	.020 1.2	.050 .5	1.146	.005	.005	.005	.0049	22.3
Max Reading	8.71 71.1	2.092 1076.6	.031 34.3	.908 359.4	1.271	.096	.014	.086	.0832	26.8
Min Average	.95 59.9	1.275 1074.7	.023 9.6	.102 288.9	1.168	.006	.005	.006	.0201	23.8
Max Average	1.99 67.6	1.439 1076.1	.028 16.7	.253 324.6	1.198	.016	.005	.016	.0575	26.0
# Valid Rdgs	245. 245.	245. 245.	245. 245.	245. 245.	245.	245.	245.	245.	205.	245.
Min.Det.Lev	.10 -	.100 950.0	.010 -	.100 -	.100	.010	.010	.010	-	-
1 hr Crit.	30.00 -	- -	.250 -	- -	-	-	.200	-	-	-

- Invalid Data / Not Calculated
- nd Average is less than Min. Detectable Level
- m One or more readings Missing
- # Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %  
Averaging Started at Nearest: .0 min

## LONDON\_B4 : 303B

Start: 84/08/30 16:56 Scan: 60 sec  
 Average: 60.00 min Report: 10.00 min  
 Loc: GLEN CAIRN PUBLIC SCHOOL

Time	CO T-abs-Hq	TRS Ozone	THC SolarRad	SO2 Temp	Non-CH4 Humidity	Methane Barom	NOx Wind-Spd	NO2 Wind-Dir	NO	Hq
16:56-17:56	.5 .07	.007 .045	1.25 .050	nd 25.1	.42 72.	1.17 1009.6	nd 14.	nd 313.	nd	nd
17:06-18:06	.5 .06	.007 .044	1.23 .046	nd 25.1	.40 71.	1.17 1009.7	nd 14.	nd 313.	nd	nd
17:16-18:16	.5 .05	.006 .044	1.20 .042	nd 24.9	.38 71.	1.16 1009.7	nd 14.	nd 312.	nd	nd
17:26-18:26	.5 .05	.006 .043	1.18 .038	nd 24.7	.37 71.	1.16 1009.8	nd 15.	nd 312.	nd	nd
17:36-18:36	.5 .06	.005 .041	1.15 .034	nd 24.5	.34 71.	1.16 1009.9	nd 15.	nd 315.	nd	nd
17:46-18:46	.5 .08	.005 .041	1.13 .030	nd 24.3	.33 71.	1.16 1010.1	nd 16.	nd 315.	nd	nd
17:56-18:56	.5 .10	.004 .041	1.10 .027	nd 24.1	.31 72.	1.16 1010.2	nd 17.	nd 316.	nd	nd

LONDON\_B4 : 3038

Page: 0002

Statistics	CO T-abs-Ho	TRS Ozone	THC SolarRad	SO2 Temp	Non-CH4 Humidity	Methane Barom	NOx Wind-Spd	NO2 Wind-Dir	NO	Hg
Units	ppm ---	ppm ppm	ppm W/cm^2	ppm d C	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ug/m^3
Arith. Mean	.52 .089	.0055 .043	1.173 .0381	.006 24.6	.360 71.9	1.165 1009.9	.007 -	.005 -	.009	.015
Std. Dev.	.10 .057	.0032 .004	.096 .0135	.002 .7	.074 2.1	.011 .4	.004 -	.000 -	.004	.023
Geo. Mean	.52 -	.0044 .043	1.169 -	.006 -	.352 -	1.165 -	.006 -	.005 -	.008	.011
Geo.Std.Dev	1.17 -	2.1055 1.088	1.086 -	1.352 -	1.250 -	1.009 -	1.524 -	1.000 -	1.555	1.657
Min Reading	.39 .000	.0010 .035	.969 .0159	.005 23.2	.202 68.0	1.143 1009.4	.005 6.9	.005 285.2	.005	.010
Max Reading	1.21 .199	.0192 .051	1.430 .0597	.016 25.7	.563 78.6	1.194 1010.6	.025 26.6	.005 342.5	.021	.181
Min Average	.52 .053	.0041 .041	1.105 .0269	.006 24.1	.307 70.6	1.161 1009.6	.006 13.7	.005 311.7	.008	.013
Max Average	.54 .101	.0070 .045	1.247 .0499	.006 25.1	.417 71.9	1.169 1010.2	.008 16.8	.005 315.7	.009	.017
# Valid Rds	122. 122.	122. 122.	122. 122.	122. 122.	122. 122.	122. 122.	122. 122.	122. 122.	122.	122.
Min.Det.Lev	.10 -	.0020 .004	.100 -	.010 -	.100 -	.100 950.0	.010 -	.010 -	.010	.050
1 hr Crit.	30.00 -	.0270 .080	- -	.250 -	- -	- -	- -	.200 -	-	-

- Invalid Data / Not Calculated  
nd Average is less than Min. Detectable Level  
m One or more readings Missing  
# Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %  
Averaging Started at Nearest: .0 min

LONDON\_B4 : 312A

Start: 84/08/31 11:29 Scan: 60 sec  
 Average: 60.00 min Report: 10.00 min  
 Loc: NEW PKNS LOT OF NEW VIC HOSPITAL

Time	CO Humidity	THC Barom	SO2 Wind-Spd	Non-CH4 Wind-Dir	Methane	NOx	NO2	NO	SolarRad	Temp
11:29-12:29	.8 46.	1.29 1015.6	.01 29.	nd 306.	1.25	nd	nd	nd	.071	23.2
11:39-12:39	.9 46.	1.27 1015.6	.01 29.	nd 305.	1.24	nd	nd	nd	.070	23.0
11:49-12:49	.8 45.	1.26 1015.5	.01 30.	nd 303.	1.24	nd	nd	nd	.072	23.0
11:59-12:59	.9 45.	1.26 1015.4	.01 31.	nd 301.	1.24	nd	nd	nd	.072	22.9
12:09-13:09	1.0 45.	1.26 1015.3	.01 32.	nd 301.	1.23	.01	nd	nd	.074	23.0
12:19-13:19	.8 44.	1.25 1015.3	.01 32.	nd 304.	1.23	.01	nd	nd	.072	23.1
12:29-13:29	.8 44.	1.25 1015.2	nd 33.	.11 301.	1.19	.01	nd	nd	.079	23.3



LONDON\_84 : 312A

Page: 0002

Statistics	CO Humidity	THC Barom	SO2 Wind-Spd	Non-CH4 Wind-Dir	Methane	NOx	NO2	NO	SolarRad	Temp
Units	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ppm	ppm	ppm	W/cm^2	d C
Arith. Mean	.83 45.1	1.267 1015.4	.010 -	.099 -	1.217	.010	.007	.005	.0750	23.2
Std. Dev.	.55 2.0	.050 .2	.004 -	.080 -	.085	.004	.003	.000	.0183	.4
Geo. Mean	.74 -	1.266 -	.009 -	.079 -	1.214	.009	.007	.005	-	-
Geo.Std.Dev	1.57 -	1.040 -	1.609 -	1.869 -	1.078	1.623	1.473	1.000	-	-
Min Reading	.11 41.7	1.188 1015.0	.005 7.7	.050 270.3	.970	.005	.005	.005	.0194	22.1
Max Reading	3.78 50.9	1.423 1015.8	.018 52.1	.366 329.6	1.412	.023	.014	.005	.1021	24.1
Min Average	.82 43.8	1.247 1015.2	.010 28.6	.067 300.7	1.187	.006	.005	.005	.0701	22.9
Max Average	.97 46.4	1.285 1015.6	.013 32.6	.110 305.7	1.252	.013	.009	.005	.0787	23.3
# Valid Rdgs	121. 121.	121. 121.	121. 121.	121. 121.	121.	121.	121.	121.	121.	121.
Min.Det.Lev	.10 -	.100 950.0	.010 -	.100 -	.100	.010	.010	.010	-	-
1 hr Crit.	30.00 -	- -	.250 -	- -	-	-	.200	-	-	-

- Invalid Data / Not Calculated
- nd Average is less than Min. Detectable Level
- m One or more readings Missing
- \* Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %  
Averaging Started at Nearest: .0 min

LONDON\_84 : 312B

Start: 84/08/31 10:11 Scan: 60 sec  
 Average: 60.00 min Report: 10.00 min  
 Loc: WESTMINSTER APARTMENTS

Time	CO T-abs-Hg	TRS Ozone	THC SolarRad	SO2 Temp	Non-CH4 Humidity	Methane Barom	NOx Wind-Spd	NO2 Wind-Dir	NO	Hg
10:11-11:11	1.0 .00	.007 .026	1.31 .072	nd 23.3	.47 65.	1.11 1018.8	.02 7.	nd 318.	.01	nd
10:21-11:21	1.0 .00	.007 .027	1.31 .075	nd 23.8	.47 61.	1.10 1018.8	.02 7.	nd 327.	.01	nd
10:31-11:31	.9 .00	.007 .027	1.30 .080	nd 24.1	.47 58.	1.10 1018.8	.02 7.	nd 335.	.01	.05
10:41-11:41	.9 .00	.008 .027	1.30 .080	nd 24.4	.47 57.	1.09 1018.8	.02 7.	nd 331.	.01	.07
10:51-11:51	.9 .00	.008 .028	1.30 .082	nd 24.4	.47 55.	1.09 1018.8	.02 7.	nd 324.	.01	.09
11:01-12:01	1.2 .00	.007 .028	1.30 .085	nd 24.6	.48 53.	1.08 1018.8	.02 8.	nd 323.	nd	.10

LONDON\_84 : 312B

Page: 0002

Statistics	CO T-abs-Hq	TRS Ozone	THC SolarRad	SO2 Temp	Non-CH4 Humidity	Methane Barom	NOx Wind-Spd	NO2 Wind-Dir	NO	Hg
Units	ppm ---	ppm ppm	ppm W/cm^2	ppm d C	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ug/m^3
Arith. Mean	1.14 .000	.0073 .027	1.317 .0795	.005 24.1	.486 58.3	1.094 1018.8	.018 -	.007 -	.012	.063
Std. Dev.	1.71 .000	.0028 .003	.148 .0133	.000 1.2	.119 9.2	.021 .1	.019 -	.003 -	.018	.054
Geo. Mean	.88 -	.0066 .027	1.310 -	.005 -	.475 -	1.094 -	.012 -	.006 -	.007	.038
Geo. Std. Dev	1.77 -	1.6610 1.100	1.107 -	1.000 -	1.234 -	1.019 -	2.228 -	1.468 -	2.215	3.031
Min Reading	.50 .000	.0010 .021	1.117 .0258	.005 21.3	.317 43.8	1.058 1018.7	.005 1.6	.005 1.4	.005	.010
Max Reading	17.71 .000	.0145 .034	2.103 .0984	.005 26.6	1.099 79.7	1.152 1019.1	.120 23.2	.022 356.2	.118	.221
Min Average	.89 .000	.0068 .026	1.297 .0719	.005 23.3	.469 53.2	1.082 1018.8	.016 6.7	.006 318.4	.010	.023
Max Average	1.16 .000	.0077 .028	1.312 .0846	.005 24.6	.477 65.4	1.109 1018.8	.019 8.0	.007 335.2	.013	.099
# Valid Rdgs	119. 119.	119. 119.	119. 119.	119. 119.	119. 119.	119. 119.	119. 119.	119. 119.	119.	119.
Min. Det. Lev	.10 -	.0020 .004	.100 -	.010 -	.100 -	.100 950.0	.010 -	.010 -	.010	.050
1 hr Crit.	30.00 -	.0270 .080	- -	.250 -	- -	- -	- -	.200 -	-	-

- Invalid Data / Not Calculated

nd Average is less than Min. Detectable Level

m One or more readings Missing

# Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %

Averaging Started at Nearest: .0 min

LONDON\_84 : 313A

Start: 84/08/31 13:57      Scan: 60 sec  
 Average: 60.00 min      Report: 10.00 min  
 Loc: #7 LUPUS PLACE (48315-475530)

Time	CO Humidity	THC Barom	SO2 Wind-Spd	Non-CH4 Wind-Dir	Methane	NOx	NO2	NO	SolarRad	Temp
13:57-14:57	.7 48.	1.54 1013.1	nd 25.	.45 297.	1.12	.01	nd	nd	.072	22.8
14:07-15:07	.7 48.	1.55 1013.1	nd 25.	.45 298.	1.13	.01	nd	nd	.072	23.0
14:17-15:17	.7 48.	1.56 1013.0	nd 25.	.45 298.	1.14	.01	nd	nd	.067	22.9
14:27-15:27	.8 48.	1.60 1013.0	nd 25.	.46 301.	1.17	.01	nd	nd	.060	22.7
14:37-15:37	.8 48.	1.63 1012.9	nd 24.	.47 303.	1.19	.01	nd	nd	.061	22.7
14:47-15:47	.8 48.	1.66 1012.9	nd 25.	.48 304.	1.21	.01	nd	nd	.059	22.7
14:57-15:57	.8 48.	1.66 1012.9	nd 26.	.47 302.	1.22	.01	nd	nd	.057	22.7

LONDON 84 : 313A

Page: 0002

Statistics	CO Humidity	THC Barom	SO2 Wind-Spd	Non-CH4 Wind-Dir	Methane	NOx	NO2	NO	SolarRad	Temp
Units	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ppm	ppm	ppm	W/cm^2	d C
Arith. Mean	.72 47.7	1.598 1013.0	.008 -	.460 -	1.172	.013	.008	.006	.0648	22.7
Std. Dev.	.14 .9	.139 .2	.003 -	.069 -	.083	.006	.003	.003	.0249	.6
Geo. Mean	.70 -	1.592 -	.007 -	.455 -	1.169	.012	.007	.005	-	-
Geo.Std.Dev	1.35 -	1.089 -	1.491 -	1.156 -	1.072	1.554	1.518	1.314	-	-
Min Reading	.05 45.2	1.336 1012.7	.005 12.3	.345 272.9	1.019	.005	.005	.005	.0145	21.2
Max Reading	.99 50.1	1.995 1013.3	.014 38.3	.713 344.2	1.415	.037	.015	.027	.0971	24.3
Min Average	.66 47.6	1.543 1012.9	.008 24.4	.450 296.9	1.124	.013	.006	.005	.0570	22.7
Max Average	.79 48.0	1.658 1013.1	.009 25.9	.479 304.1	1.221	.014	.009	.006	.0724	23.0
# Valid Rdgs	122. 122.	122. 122.	122. 122.	122. 122.	122.	122.	122.	122.	122.	122.
Min.Det.Lev	.10 -	.100 950.0	.010 -	.100 -	.100	.010	.010	.010	-	-
1 hr Crit.	30.00 -	- -	.250 -	- -	-	-	.200	-	-	-

- Invalid Data / Not Calculated

nd Average is less than Min. Detectable Level

m One or more readings Missing

\* Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %

Averaging Started at Nearest: .0 min

LONDON\_84 : 313B

Start: 84/08/31 12:46 Scan: 60 sec  
 Average: 60.00 min Report: 10.00 min  
 Loc: ARTHUR STRINGER PUBLIC SCHOOL

Time	CO T-abs-Hq	TRS Ozone	THC SolarRad	SO2 Temp	Non-CH4 Humidity	Methane Barom	NOx Wind-Spd	NO2 Wind-Dir	NO	Hg
12:46-13:46	.5 .00	.009 .031	1.34 .088	nd 24.8	.53 48.	1.05 1017.1	nd 14.	nd 318.	nd	.08
12:56-13:56	.5 .00	.010 .032	1.36 .080	nd 24.7	.54 48.	1.04 1017.2	nd 13.	nd 320.	nd	.09
13:06-14:06	.5 .00	.010 .032	1.38 .076	.01 24.5	.56 49.	1.04 1017.2	nd 13.	nd 320.	nd	.10
13:16-14:16	.5 .00	.010 .032	1.40 .075	.01 24.6	.57 49.	1.05 1017.2	nd 13.	nd 322.	nd	.12
13:26-14:26	.5 .00	.010 .033	1.40 .077	.01 24.5	.58 49.	1.05 1017.2	nd 13.	nd 321.	nd	.13
13:36-14:36	.5 .00	.010 .033	1.42 .072	.01 24.5	.59 49.	1.05 1017.2	nd 13.	nd 323.	nd	.14
13:46-14:46	.5 .00	.010 .034	1.42 .076	.01 24.4	.59 50.	1.05 1017.2	nd 14.	nd 322.	nd	.14
13:56-14:56	.5 .00	.010 .035	1.43 .084	.01 24.6	.60 50.	1.05 1017.2	nd 13.	nd 319.	nd	.14
14:06-15:06	.5 .00	.009 .036	1.43 .091	nd 24.9	.60 49.	1.05 1017.2	nd 13.	nd 317.	nd	.14
14:16-15:16	.5 .00	.009 .036	1.45 .086	nd 24.9	.61 50.	1.05 1017.2	nd 13.	nd 319.	nd	.14
14:26-15:26	.5 .00	.010 .037	1.46 .074	nd 24.7	.62 50.	1.05 1017.1	nd 13.	nd 320.	nd	.14
14:36-15:36	.5 .00	.010 .037	1.48 .075	nd 24.5	.64 50.	1.05 1017.1	nd 12.	nd 321.	nd	.14

LONDON\_84 : 313B

Page: 0002

Statistics	CO T-abs-Hg	TRS Ozone	THC SolarRad	SO2 Temp	Non-CH4 Humidity	Methane Barom	NOx Wind-Spd	NO2 Wind-Dir	NO	Hg
Units	ppm ---	ppm ppm	ppm W/cm^2	ppm d C	ppm %-rel	ppm mbar-msl	ppm km/h	ppm deg	ppm	ug/m^3
Arith. Mean	.49 .000	.0093 .034	1.414 .0794	.009 24.6	.587 49.2	1.046 1017.1	.005 -	.005 -	.005	.121
Std. Dev.	.15 .000	.0027 .003	.072 .0305	.004 .7	.057 1.5	.008 .1	.001 -	.001 -	.000	.049
Geo. Mean	.48 -	.0088 .034	1.412 -	.008 -	.584 -	1.046 -	.005 -	.005 -	.005	.112
Geo.Std.Dev	1.20 -	1.4228 1.100	1.053 -	1.620 -	1.105 -	1.008 -	1.177 -	1.122 -	1.000	1.496
Min Reading	.37 .000	.0010 .027	1.240 .0212	.005 22.9	.452 45.7	1.027 1017.0	.005 5.8	.005 276.8	.005	.010
Max Reading	1.86 .000	.0176 .041	1.632 .1184	.019 26.0	.750 52.7	1.079 1017.4	.014 26.1	.012 358.6	.005	.311
Min Average	.47 .000	.0089 .031	1.338 .0719	.006 24.4	.526 48.0	1.044 1017.1	.005 12.2	.005 317.5	.005	.084
Max Average	.52 .000	.0099 .037	1.479 .0910	.014 24.9	.639 50.3	1.048 1017.2	.006 14.1	.005 323.3	.005	.143
# Valid Rds	176. 176.	176. 176.	176. 176.	176. 176.	176. 176.	176. 176.	176. 176.	176. 176.	176.	176.
Min.Det.Lev	.10 -	.0020 .004	.100 -	.010 -	.100 -	.100 950.0	.010 -	.010 -	.010	.050
1 hr Crit.	30.00 -	.0270 .080	- -	.250 -	- -	- -	- -	.200 -	-	-

- Invalid Data / Not Calculated

nd Average is less than Min. Detectable Level

m One or more readings Missing

# Average is above Provincial Std/Criteria

Percent Valid Data Required for Valid Average: 90.0 %

Averaging Started at Nearest: .0 min

Appendix B



46

SURVEY NAME

LONDON AUGUST-SEPTEMBER 1984

MAMU#1

DATE: AUGUST 27/84

units ug/m3

\*\*\*\*\*

MAMU LOCATION # 271A

-----  
TIME PERIOD 1634-1734  
-----

PROPANE	1.26
PROPADIENE	
PROPYNE	
CHLOROMETHANE	
CYCLOPROPANE	
ISOBUTANE	
VINYL CHLORIDE	
1-BUTENE	
1,3-BUTADIENE	
BUTANE	2.33
1-BUTYNE	
CHLOROETHANE	
3-METHYL-1-BUTENE	
2-METHYLBUTANE	3.04
1-PENTENE	
PENTANE	1.52
ISOPRENE	
TRANS-2-PENTENE	
DICHLOROMETHANE	
2-METHYL-2-BUTENE	
2-CHLORO-2-METHYLBUTANE	
3-CHLOROPROPENE	
2,2-DIMETHYLBUTANE	
3-METHYL-1-PENTENE	
2,3-DIMETHYLBUTANE	
3-METHYLPENTANE	0.38
1-HEXENE	0.34
CIS-1,2-DICHLOROETHYLENE	
2-CHLOROBUTANE	
HEXANE	0.67
CHLOROFORM	
TRANS-3-HEXENE	
3-CHLORO-2-METHYLPROPENE	
METHYLCYCLOPENTANE	0.18
1,2-DICHLOROETHANE	
1,1,1-TRICHLOROETHANE	
1-CHLOROBUTANE	
BENZENE	1.92
CARBON TETRACHLORIDE	
CYCLOHEXANE	
2-METHYLHEXANE	0.44
2,3-DIMETHYLPENTANE	0.24
CYCLOHEXENE	
DIBROMOMETHANE	
3-METHYLHEXANE	0.42
1,2-DICHLOROPROPANE	
2,3-DICHLOROPROPANE	
TRICHLOROETHYLENE	
2,2,4-TRIMETHYLPENTANE	
1-HEPTENE	
HEPTANE	
1-CHLORO-2-METHYLBUTANE	

TRANS-2-HEPTENE  
METHYLCYCLOHEXANE  
2,5-DIMETHYLHEXANE  
4-METHYLCYCLOHEXENE  
1-CHLOROPENTANE  
1,1,2-TRICHLOROETHANE  
TOLUENE  
1,3-DICHLOROPROPANE  
2-METHYLHEPTANE  
1,2-DIBROMOETHANE  
1-OCTENE  
TRANS-1,2-DIMETHYLCYCLOHEXANE  
TRANS-4-OCTENE  
TETRACHLOROETHYLENE  
OCTANE  
2-METHYL-1-HEPTENE  
2-OCTENE  
CIS-1,2-DIMETHYLCYCLOHEXANE  
CHLOROBENZENE  
PROPYLCYCLOPENTANE  
ETHYLCYCLOHEXANE  
1-CHLOROHXANE  
ETHYLBENZENE  
M-XYLENE  
STYRENE  
1,4-DICHLOROBUTANE  
O-XYLENE  
1,1,2,2-TETRACHLOROETHANE  
1,2,3-TRICHLOROPROPANE  
1-NONENE  
NONANE  
ISOPROPYLBENZENE  
2-CHLOROTOLUENE  
3-CHLOROTOLUENE  
N-PROPYLBENZENE  
4-CHLOROTOLUENE  
3-ETHYLTOLUENE  
4-ETHYLTOLUENE  
1,3,5-TRIMETHYLBENZENE  
2-ETHYLTOLUENE  
T-BUTYLBENZENE  
1,2,4-TRIMETHYLBENZENE  
1,3-DICHLOROBENZENE  
1-DECENE  
4-CHLOROTOLUENE  
1,5-DICHLOROPENTANE  
DECANE  
SEC. BUTYLBENZENE  
3-(CHLOROMETHYL)-HEPTANE  
1,2,3-TRIMETHYLBENZENE  
1-ISOPROPYL-4-METHYLBENZENE  
1,2-DICHLOROBENZENE  
INDAN  
N-BUTYLCYCLOHEXANE  
1,3-DIETHYLBENZENE  
1,4-DIETHYLBENZENE  
N-BUTYLBENZENE  
1,2-DIETHYLBENZENE  
DECALIN  
UNDECANE  
1,2,3,5-TETRAMETHYLBENZENE  
DIISOPROPYLBENZENE  
1,2,3,4-TETRAMETHYLBENZENE  
TETRALIN  
DODECANE

45

Total hydrocarbons ug/m3:	12.74
Alkanes ug/m3	10.30
Cycloalkanes ug/m3	0.18
Alkenes ug/m3	0.34
Cycloalkenes ug/m3	0.00
Alkynes ug/m3	0.00
Aromatics ug/m3	1.92
Chlorinated alkanes ug/m3	0.00
Chlorinated alkenes ug/m3	0.00
Chlorinated aromatics ug/m3	0.00

Total # of compounds identified	12
---------------------------------	----

Total # of peaks	33
------------------	----

Total area of peaks	1324.55
---------------------	---------

Area of identified peaks	496.93
--------------------------	--------

Area % identified peaks	38
-------------------------	----

Toluene:Ethylbenzene

Benzene:Ethylbenzene

Xylenes:Ethylbenzene

Ethylbenzene:Ethylbenzene

## SURVEY NAME

LONDON AUGUST-SEPTEMBER 1984

units ug/m3

DATE: AUGUST 28/84

MANU LOCATION #

281A

281A

TIME PERIOD

1447-1547

1547-1647

PROPANE	2.63	
PROPADIENE		
PROPYNE		
CHLOROMETHANE		
CYCLOPROPANE		
ISOBUTANE	2.38	
VINYL CHLORIDE		
1-BUTENE		
1,3-BUTADIENE		
BUTANE	6.14	9.19
1-BUTYNE		
CHLOROETHANE		
3-METHYL-1-BUTENE		
2-METHYLBUTANE		4.73
1-PENTENE		
PENTANE		2.97
ISOPRENE		
TRANS-2-PENTENE		
DICHLOROMETHANE		
2-METHYL-2-BUTENE		
2-CHLORO-2-METHYLBUTANE		
3-CHLOROPROPENE		
2,2-DIMETHYLBUTANE		0.54
3-METHYL-1-PENTENE		
2,3-DIMETHYLBUTANE	0.98	
3-METHYLPENTANE	1.95	
1-HEXENE		
CIS-1,2-DICHLOROETHYLENE		
2-CHLOROBUTANE		
HEXANE	2.73	
CHLOROFORM		
TRANS-3-HEXENE		
3-CHLORO-2-METHYLPROPENE		
METHYLCYCLOPENTANE		
1,2-DICHLOROETHANE		
1,1,1-TRICHLOROETHANE		
1-CHLOROBUTANE		
BENZENE		
CARBON TETRACHLORIDE		
CYCLOHEXANE		
2-METHYLHEXANE		
2,3-DIMETHYLPENTANE		
CYCLOHEXENE		
DIBROMOMETHANE		
3-METHYLHEXANE		
1,2-DICHLOROPROPANE		
2,3-DICHLOROPROPANE		
TRICHLOROETHYLENE		0.38
2,2,4-TRIMETHYLPENTANE		
1-HEPTENE		
HEPTANE		1.52
1-CHLORO-2-METHYLBUTANE		

TRANS-2-HEPTENE		
METHYLCYCLOHEXANE		
2,5-DIMETHYLHEXANE		0.52
4-METHYLCYCLOHEXENE	0.25	0.25
1-CHLOROPENTANE		
1,1,2-TRICHLOROETHANE		
TOLUENE		7.02
1,3-DICHLOROPROPANE		
2-METHYLHEPTANE		0.66
1,2-DIBROMOETHANE		
1-OCTENE		
TRANS-1,2-DIMETHYLCYCLOHEXANE		0.25
TRANS-4-OCTENE		
TETRACHLOROETHYLENE		
OCTANE	0.62	1.00
2-METHYL-1-HEPTENE		
2-OCTENE		
CIS-1,2-DIMETHYLCYCLOHEXANE		
CHLOROBENZENE		
PROPYLCYCLOPENTANE		
ETHYLCYCLOHEXANE		0.68
1-CHLOROHXANE		
ETHYLBENZENE	0.85	2.30
M-XYLENE	1.17	4.87
STYRENE		
1,4-DICHLOROBUTANE		
O-XYLENE	0.36	1.57
1,1,2,2-TETRACHLOROETHANE		
1,2,3-TRICHLOROPROPANE		
1-NONENE		
NONANE		0.70
ISOPROPYLBENZENE		
2-CHLOROTOLUENE		
3-CHLOROTOLUENE		
N-PROPYLBENZENE		
4-CHLOROTOLUENE		
3-ETHYLTOLUENE		0.58
4-ETHYLTOLUENE		
1,3,5-TRIMETHYLBENZENE		
2-ETHYLTOLUENE		
T-BUTYLBENZENE		
1,2,4-TRIMETHYLBENZENE		1.19
1,3-DICHLOROBENZENE		
1-DECENE		
A-CHLOROTOLUENE		
1,5-DICHLOROPENTANE		
DECANE		0.47
SEC. BUTYLBENZENE		
3-(CHLOROMETHYL)-HEPTANE		
1,2,3-TRIMETHYLBENZENE		
1-ISOPROPYL-4-METHYLBENZENE		
1,2-DICHLOROBENZENE		
INDAN		
N-BUTYLCYCLOHEXANE		
1,3-DIETHYLBENZENE		
1,4-DIETHYLBENZENE		
N-BUTYLBENZENE		
1,2-DIETHYLBENZENE		
DECALIN		
UNDECANE		
1,2,3,5-TETRAMETHYLBENZENE		
DIISOPROPYLBENZENE		
1,2,3,4-TETRAMETHYLBENZENE		
TETRALIN		
DODECANE		

Total hydrocarbons ug/m3:	20.06	41.39
Alkanes ug/m3	17.43	22.30
Cycloalkanes ug/m3	0.00	0.93
Alkenes ug/m3	0.00	0.00
Cycloalkenes ug/m3	0.25	0.25
Alkynes ug/m3	0.00	0.00
Aromatics ug/m3	2.38	17.53
Chlorinated alkanes ug/m3	0.00	0.00
Chlorinated alkenes ug/m3	0.00	0.38
Chlorinated aromatics ug/m3	0.00	0.00

Total # of compounds identified	11	20
---------------------------------	----	----

Total # of peaks	49	64
------------------	----	----

Total area of peaks	3056.90	4732.15
---------------------	---------	---------

Area of identified peaks	823.00	1704.39
--------------------------	--------	---------

Area % identified peaks	27	36
-------------------------	----	----

Toluene:Ethylbenzene	0.00	3.05
----------------------	------	------

Benzene:Ethylbenzene	0.00	0.00
----------------------	------	------

Xylenes:Ethylbenzene	1.80	2.80
----------------------	------	------

Ethylbenzene:Ethylbenzene	1.00	1.00
---------------------------	------	------

## SURVEY NAME

LONDON AUGUST-SEPTEMBER 1984

units ug/m3

DATE: AUGUST 30/84

MAMU LOCATION #

302A

302A

TIME PERIOD

1651-1751

1751-1851

PROPANE	1.30	2.96
PROPADIENE		
PROPYNE	0.27	
CHLOROMETHANE	1.00	0.80
CYCLOPROPANE		
ISOBUTANE		
VINYL CHLORIDE		
1-BUTENE		
1,3-BUTADIENE	0.99	
BUTANE	11.21	34.37
1-BUTYNE		
CHLOROETHANE		
3-METHYL-1-BUTENE		
2-METHYLBUTANE	20.22	35.84
1-PENTENE		
PENTANE	11.25	16.54
ISOPRENE		
TRANS-2-PENTENE		
DICHLOROMETHANE		
2-METHYL-2-BUTENE		
2-CHLORO-2-METHYLBUTANE		
3-CHLOROPROPENE		
2,2-DIMETHYLBUTANE	0.61	0.76
3-METHYL-1-PENTENE		
2,3-DIMETHYLBUTANE	1.03	1.16
3-METHYLPENTANE		3.11
1-HEXENE		
CIS-1,2-DICHLOROETHYLENE		
2-CHLOROBUTANE		
HEXANE		4.24
CHLOROFORM		
TRANS-3-HEXENE		
3-CHLORO-2-METHYLPROPENE		
METHYLCYCLOPENTANE		1.69
1,2-DICHLOROETHANE		
1,1,1-TRICHLOROETHANE		
1-CHLOROBUTANE		
BENZENE	5.18	8.61
CARBON TETRACHLORIDE		
CYCLOHEXANE		
2-METHYLHEXANE		
2,3-DIMETHYLPENTANE	2.58	2.50
CYCLOHEXENE		
DIBROMOMETHANE		
3-METHYLHEXANE		
1,2-DICHLOROPROPANE		
2,3-DICHLOROPROPANE		
TRICHLOROETHYLENE		
2,2,4-TRIMETHYLPENTANE		
1-HEPTENE		
HEPTANE		

TRANS-2-HEPTENE		
METHYLCYCLOHEXANE		
2,5-DIMETHYLHEXANE		
4-METHYLCYCLOHEXENE		
1-CHLOROPENTANE		
1,1,2-TRICHLOROETHANE		
TOLUENE	5.82	6.52
1,3-DICHLOROPROPANE		
2-METHYLHEPTANE		
1,2-DIBROMOETHANE		
1-OCTENE		
TRANS-1,2-DIMETHYLCYCLOHEXANE		
TRANS-4-OCTENE		
TETRACHLOROETHYLENE		
OCTANE		
2-METHYL-1-HEPTENE		
2-OCTENE		
CIS-1,2-DIMETHYLCYCLOHEXANE		
CHLOROBENZENE		
PROPYLCYCLOPENTANE		
ETHYLCYCLOHEXANE		
1-CHLOROHEXANE		
ETHYLBENZENE		
M-XYLENE		
STYRENE		
1,4-DICHLOROBUTANE		
O-XYLENE		
1,1,2,2-TETRACHLOROETHANE		
1,2,3-TRICHLOROPROPANE		
1-NONENE		
NONANE		
ISOPROPYLBENZENE		
2-CHLOROTOLUENE		
3-CHLOROTOLUENE		
N-PROPYLBENZENE		
4-CHLOROTOLUENE		
3-ETHYLTOLUENE	0.77	0.63
4-ETHYLTOLUENE		
1,3,5-TRIMETHYLBENZENE		
2-ETHYLTOLUENE		
T-BUTYLBENZENE		
1,2,4-TRIMETHYLBENZENE	1.30	1.11
1,3-DICHLOROBENZENE		
1-DECENE		
A-CHLOROTOLUENE		
1,5-DICHLOROPENTANE		
DECANE		
SEC. BUTYLBENZENE		
3-(CHLOROMETHYL)-HEPTANE		
1,2,3-TRIMETHYLBENZENE		
1-ISOPROPYL-4-METHYLBENZENE		
1,2-DICHLOROBENZENE		
INDAN		
N-BUTYLCYCLOHEXANE		
1,3-DIETHYLBENZENE		
1,4-DIETHYLBENZENE		
N-BUTYLBENZENE		
1,2-DIETHYLBENZENE		
DECALIN		
UNDECANE		
1,2,3,5-TETRAMETHYLBENZENE		
DIISOPROPYLBENZENE		
1,2,3,4-TETRAMETHYLBENZENE		
TETRALIN		
DODECANE		



5, 4

Total hydrocarbons ug/m3:	63.53	120.84
Alkanes ug/m3	48.20	101.48
Cycloalkanes ug/m3	0.00	1.69
Alkenes ug/m3	0.99	0.00
Cycloalkenes ug/m3	0.00	0.00
Alkynes ug/m3	0.27	0.00
Aromatics ug/m3	13.07	16.87
Chlorinated alkanes ug/m3	1.00	0.80
Chlorinated alkenes ug/m3	0.00	0.00
Chlorinated aromatics ug/m3	0.00	0.00

Total # of compounds identified	14	15
---------------------------------	----	----

Total # of peaks	57	52
------------------	----	----

Total area of peaks	4730.56	7268.62
---------------------	---------	---------

Area of identified peaks	2715.01	5081.40
--------------------------	---------	---------

Area % identified peaks	57	70
-------------------------	----	----

Toluene:Ethylbenzene

Benzene:Ethylbenzene

Xylenes:Ethylbenzene

Ethylbenzene:Ethylbenzene



TRANS-2-HEPTENE				
METHYLCYCLOHEXANE	0.25			
2,5-DIMETHYLHEXANE				
4-METHYLCYCLOHEXENE				
1-CHLOROPENTANE				
1,1,2-TRICHLOROETHANE				
TOLUENE	1.20	2.35	1.62	3.85
1,3-DICHLOROPROPANE				
2-METHYLHEPTANE				
1,2-DIBROMOETHANE				
1-OCTENE				
TRANS-1,2-DIMETHYLCYCLOHEXANE				
TRANS-4-OCTENE				
TETRACHLOROETHYLENE				
OCTANE				
2-METHYL-1-HEPTENE				
2-OCTENE				
CIS-1,2-DIMETHYLCYCLOHEXANE				
CHLOROBENZENE				
PROPYLCYCLOPENTANE				
ETHYLCYCLOHEXANE				
1-CHLOROHXANE				
ETHYLBENZENE				
M-XYLENE				
STYRENE				
1,4-DICHLOROBUTANE				
O-XYLENE	0.35			
1,1,2,2-TETRACHLOROETHANE				
1,2,3-TRICHLOROPROPANE				
1-NONENE				
NONANE				
ISOPROPYLBENZENE				
2-CHLOROTOLUENE				
3-CHLOROTOLUENE				
N-PROPYLBENZENE				
4-CHLOROTOLUENE				
3-ETHYLTOLUENE	0.22			
4-ETHYLTOLUENE				
1,3,5-TRIMETHYLBENZENE				
2-ETHYLTOLUENE				
T-BUTYLBENZENE				
1,2,4-TRIMETHYLBENZENE	0.78			
1,3-DICHLOROBENZENE				
1-DECENE				
A-CHLOROTOLUENE				
1,5-DICHLOROPENTANE				
DECANE				
SEC. BUTYLBENZENE				
3-(CHLOROMETHYL)-HEPTANE				
1,2,3-TRIMETHYLBENZENE				
1-ISOPROPYL-4-METHYLBENZENE				
1,2-DICHLOROBENZENE				
INDAN				
N-BUTYLCYCLOHEXANE				
1,3-DIETHYLBENZENE				
1,4-DIETHYLBENZENE				
N-BUTYLBENZENE				
1,2-DIETHYLBENZENE				
DECALIN				
UNDECANE				
1,2,3,5-TETRAMETHYLBENZENE				
DIISOPROPYLBENZENE				
1,2,3,4-TETRAMETHYLBENZENE				
TETRALIN				
DODECANE				

Total hydrocarbons ug/m3:	18.27	32.32	23.89	26.85
Alkanes ug/m3	15.11	25.16	19.53	15.42
Cycloalkanes ug/m3	0.00	0.78	0.48	0.44
Alkenes ug/m3	0.39	0.00	0.00	0.34
Cycloalkenes ug/m3	0.00	0.00	0.00	0.00
Alkynes ug/m3	0.00	0.00	0.00	0.00
Aromatics ug/m3	2.77	5.93	3.88	10.65
Chlorinated alkanes ug/m3	0.00	0.45	0.00	0.00
Chlorinated alkenes ug/m3	0.00	0.00	0.00	0.00
Chlorinated aromatics ug/m3	0.00	0.00	0.00	0.00

Total # of compounds identified	9	20	13	13
---------------------------------	---	----	----	----

Total # of peaks	26	47	30	32
------------------	----	----	----	----

Total area of peaks	1094.48	1900.00	1877.45	1891.91
---------------------	---------	---------	---------	---------

Area of identified peaks	734.10	1220.00	1015.10	1138.92
--------------------------	--------	---------	---------	---------

Area % identified peaks	67	64	54	60
-------------------------	----	----	----	----

Toluene:Ethylbenzene

Benzene:Ethylbenzene

Xylenes:Ethylbenzene

Ethylbenzene:Ethylbenzene

## SURVEY NAME

LONDON AUGUST-SEPTEMBER 1984

units ug/m3

DATE: SEPTEMBER 4/84

MANU LOCATION #

041A

041A

041A

041A

TIME PERIOD

1142-1253

1353-1453

1253-1353

1453-1553

PROPANE		1.38		1.42
PROPADIENE				
PROPYNE				
CHLOROMETHANE				
CYCLOPROPANE				
ISOBUTANE		1.18		
VINYL CHLORIDE				
1-BUTENE				
1,3-BUTADIENE				
BUTANE	2.05	1.49		1.67
1-BUTYNE				
CHLOROETHANE				
3-METHYL-1-BUTENE				
2-METHYLBUTANE			1.28	
1-PENTENE				
PENTANE			0.67	
ISOPRENE				
TRANS-2-PENTENE				
DICHLOROMETHANE				
2-METHYL-2-BUTENE				
2-CHLORO-2-METHYLBUTANE				
3-CHLOROPROPENE				
2,2-DIMETHYLBUTANE				
3-METHYL-1-PENTENE				
2,3-DIMETHYLBUTANE				
3-METHYLPENTANE				
1-HEXENE				
CIS-1,2-DICHLOROETHYLENE				
2-CHLOROBUTANE				
HEXANE				
CHLOROFORM				
TRANS-3-HEXENE				
3-CHLORO-2-METHYLPROPENE				
METHYLCYCLOPENTANE				
1,2-DICHLOROETHANE				
1,1,1-TRICHLOROETHANE				
1-CHLOROBUTANE				
BENZENE	1.53	5.61	1.62	1.73
CARBON TETRACHLORIDE				
CYCLOHEXANE				
2-METHYLHEXANE				
2,3-DIMETHYLPENTANE				0.37
CYCLOHEXENE				
DIBROMOMETHANE				
3-METHYLHEXANE				
1,2-DICHLOROPROPANE				
2,3-DICHLOROPROPANE				
TRICHLOROETHYLENE				
2,2,4-TRIMETHYLPENTANE				0.21
1-HEPTENE				
HEPTANE				

TRANS-2-HEPTENE			
METHYLCYCLOHEXANE			
2,5-DIMETHYLHEXANE			
4-METHYLCYCLOHEXENE			
1-CHLOROPENTANE			
1,1,2-TRICHLOROETHANE			
TOLUENE	0.84	1.95	1.71
1,3-DICHLOROPROPANE			
2-METHYLHEPTANE			
1,2-DIBROMOETHANE			
1-OCTENE			
TRANS-1,2-DIMETHYLCYCLOHEXANE			
TRANS-4-OCTENE			
TETRACHLOROETHYLENE			
OCTANE			
2-METHYL-1-HEPTENE			
2-OCTENE			
CIS-1,2-DIMETHYLCYCLOHEXANE			
CHLOROBENZENE			
PROPYLCYCLOPENTANE			
ETHYLCYCLOHEXANE			
1-CHLOROHXANE			
ETHYLBENZENE			
M-XYLENE			
STYRENE			
1,4-DICHLOROBUTANE			
O-XYLENE			
1,1,2,2-TETRACHLOROETHANE			
1,2,3-TRICHLOROPROPANE			
1-NONENE			
NONANE			
ISOPROPYLBENZENE			
2-CHLOROTOLUENE			
3-CHLOROTOLUENE			
N-PROPYLBENZENE			
4-CHLOROTOLUENE			
3-ETHYLTOLUENE			
4-ETHYLTOLUENE			
1,3,5-TRIMETHYLBENZENE			
2-ETHYLTOLUENE			
T-BUTYLBENZENE			
1,2,4-TRIMETHYLBENZENE			
1,3-DICHLOROBENZENE			
1-DECENE			
A-CHLOROTOLUENE			
1,5-DICHLOROPENTANE			
DECANE			
SEC. BUTYLBENZENE			
3-(CHLOROMETHYL)-HEPTANE			
1,2,3-TRIMETHYLBENZENE			
1-ISOPROPYL-4-METHYLBENZENE			
1,2-DICHLOROBENZENE			
INDAN			
N-BUTYLCYCLOHEXANE			
1,3-DIETHYLBENZENE			
1,4-DIETHYLBENZENE			
N-BUTYLBENZENE			
1,2-DIETHYLBENZENE			
DECALIN			
UNDECANE			
1,2,3,5-TETRAMETHYLBENZENE			
DIISOPROPYLBENZENE			
1,2,3,4-TETRAMETHYLBENZENE			
TETRALIN			
DODECANE			

Total hydrocarbons ug/m3:	4.42	11.61	3.57	7.11
Alkanes ug/m3	2.05	4.05	1.95	3.67
Cycloalkanes ug/m3	0.00	0.00	0.00	0.00
Alkenes ug/m3	0.00	0.00	0.00	0.00
Cycloalkenes ug/m3	0.00	0.00	0.00	0.00
Alkynes ug/m3	0.00	0.00	0.00	0.00
Aromatics ug/m3	2.37	7.56	1.62	3.44
Chlorinated alkanes ug/m3	0.00	0.00	0.00	0.00
Chlorinated alkenes ug/m3	0.00	0.00	0.00	0.00
Chlorinated aromatics ug/m3	0.00	0.00	0.00	0.00

Total # of compounds identified	3	5	3	6
---------------------------------	---	---	---	---

Total # of peaks	30	24	22	34
------------------	----	----	----	----

Total area of peaks	800.00	1469.05	536.00	997.00
---------------------	--------	---------	--------	--------

Area of identified peaks	190.00	524.52	182.00	302.50
--------------------------	--------	--------	--------	--------

Area % identified peaks	24	36	34	30
-------------------------	----	----	----	----

Toluene:Ethylbenzene

Benzene:Ethylbenzene

Xylenes:Ethylbenzene

Ethylbenzene:Ethylbenzene

## SURVEY NAME

LONDON AUGUST-SEPTEMBER 1984

units ug/m3

DATE: SEPTEMBER 5/84

XX

MANU LOCATION # 052A 052A 052A 053A 053A

TIME PERIOD	1059-1159	1259-1359	1546-1646
	1159-1259	1446-1546	

PROPANE		1.45	5.68	10.91
PROPADIENE				
PROPYNE				0.38
CHLOROMETHANE	0.61		3.36	0.60
CYCLOPROPANE				
ISOBUTANE	0.65		0.94	1.06
VINYL CHLORIDE				
1-BUTENE	0.10	0.57		
1,3-BUTADIENE		0.53	0.13	2.73
BUTANE	1.94	0.59	2.24	3.07
1-BUTYNE				
CHLOROETHANE				
3-METHYL-1-BUTENE				
2-METHYLBUTANE	2.94	0.99	3.63	9.01
1-PENTENE				
PENTANE	1.49	0.96	1.20	5.03
ISOPRENE				
TRANS-2-PENTENE				
DICHLOROMETHANE				
2-METHYL-2-BUTENE				
2-CHLORO-2-METHYLBUTANE				
3-CHLOROPROPENE				
2,2-DIMETHYLBUTANE				0.41
3-METHYL-1-PENTENE				
2,3-DIMETHYLBUTANE	0.20		0.29	1.10
3-METHYLPENTANE	0.36		0.55	1.75
1-HEXENE				
CIS-1,2-DICHLOROETHYLENE				0.07
2-CHLOROBUTANE				
HEXANE	0.56		0.73	2.50
CHLOROFORM				
TRANS-3-HEXENE				
3-CHLORO-2-METHYLPROPENE				
METHYLCYCLOPENTANE	0.17		0.25	0.93
1,2-DICHLOROETHANE				
1,1,1-TRICHLOROETHANE				
1-CHLOROBUTANE				
BENZENE	1.16	3.93	1.27	6.97
CARBON TETRACHLORIDE				
CYCLOHEXANE				
2-METHYLHEXANE	0.59			2.90
2,3-DIMETHYLPENTANE	0.32	0.60	0.45	1.59
CYCLOHEXENE				
DIBROMOMETHANE				
3-METHYLHEXANE	0.44			2.28
1,2-DICHLOROPROPANE				
2,3-DICHLOROPROPANE				0.18
TRICHLOROETHYLENE				0.17
2,2,4-TRIMETHYLPENTANE	0.16		0.19	0.55
1-HEPTENE				
HEPTANE	0.19			0.83
1-CHLORO-3-METHYLBUTANE				



62

TRANS-2-HEPTENE					
METHYLCYCLOHEXANE	0.14		0.56	0.74	
2,5-DIMETHYLHEXANE					
4-METHYLCYCLOHEXENE					
1-CHLOROPENTANE			0.12	0.16	
1,1,2-TRICHLOROETHANE					
TOLUENE	1.71	2.47	1.61	6.89	8.52
1,3-DICHLOROPROPANE					
2-METHYLHEPTANE					
1,2-DIBROMOETHANE					
1-OCTENE			0.06	0.09	
TRANS-1,2-DIMETHYLCYCLOHEXANE				0.07	
TRANS-4-OCTENE					
TETRACHLOROETHYLENE					
OCTANE				0.55	
2-METHYL-1-HEPTENE					
2-OCTENE					
CIS-1,2-DIMETHYLCYCLOHEXANE				0.16	
CHLOROBENZENE					
PROPYLCYCLOPENTANE				0.07	
ETHYLCYCLOHEXANE			0.13		
1-CHLOROHEXANE				0.24	
ETHYLBENZENE				2.17	
M-XYLENE+P-XYLENE			0.81	3.19	5.57
STYRENE					
1,4-DICHLOROBUTANE					
O-XYLENE			0.85	1.76	
1,1,2,2-TETRACHLOROETHANE			2.60		
1,2,3-TRICHLOROPROPANE					
1-NONENE					
NONANE				0.36	
ISOPROPYLBENZENE					
2-CHLOROTOLUENE					
3-CHLOROTOLUENE					
N-PROPYLBENZENE					
4-CHLOROTOLUENE				0.24	
3-ETHYLTOLUENE			0.27	0.87	
4-ETHYLTOLUENE		0.14	0.20		
1,3,5-TRIMETHYLBENZENE					
2-ETHYLTOLUENE				0.37	
T-BUTYLBENZENE					
1,2,4-TRIMETHYLBENZENE				1.59	
1,3-DICHLOROBENZENE					
1-DECENE					
A-CHLOROTOLUENE					
1,5-DICHLOROPENTANE					
DECANE					
SEC. BUTYLBENZENE					
3-(CHLOROMETHYL)-HEPTANE					
1,2,3-TRIMETHYLBENZENE					
1-ISOPROPYL-4-METHYLBENZENE					
1,2-DICHLOROBENZENE					
INDAN					
N-BUTYLCYCLOHEXANE					
1,3-DIETHYLBENZENE					
1,4-DIETHYLBENZENE					
N-BUTYLBENZENE					
1,2-DIETHYLBENZENE					
DECALIN					
UNDECANE					
1,2,3,5-TETRAMETHYLBENZENE					
DIISOPROPYLBENZENE					
1,2,3,4-TETRAMETHYLBENZENE					
TETRALIN					
DODECANE					

Total hydrocarbons ug/m3:	13.73	12.23	13.35	63.53	90.09
Alkanes ug/m3	9.84	4.59	9.28	37.23	56.82
Cycloalkanes ug/m3	0.31	0.00	0.25	1.62	2.42
Alkenes ug/m3	0.10	1.10	0.13	0.06	2.82
Cycloalkenes ug/m3	0.00	0.00	0.00	0.00	0.00
Alkynes ug/m3	0.00	0.00	0.00	0.00	0.38
Aromatics ug/m3	2.87	6.54	3.69	18.37	25.82
Chlorinated alkanes ug/m3	0.61	0.00	0.00	6.08	1.00
Chlorinated alkenes ug/m3	0.00	0.00	0.00	0.17	0.59
Chlorinated aromatics ug/m3	0.00	0.00	0.00	0.00	0.24

Total # of compounds identified	18	10	13	27	39
---------------------------------	----	----	----	----	----

Total # of peaks	36	76	48	90	98
------------------	----	----	----	----	----

Total area of peaks	823.69	1557.00	1037.00	4085.00	4539.00
---------------------	--------	---------	---------	---------	---------

Area of identified peaks	562.00	525.00	567.00	2503.00	3332.00
--------------------------	--------	--------	--------	---------	---------

Area % identified peaks	68	34	55	61	73
-------------------------	----	----	----	----	----

Toluene:Ethylbenzene					3.93
----------------------	--	--	--	--	------

Benzene:Ethylbenzene					2.29
----------------------	--	--	--	--	------

Xylenes:Ethylbenzene					3.38
----------------------	--	--	--	--	------

Ethylbenzene:Ethylbenzene					1.00
---------------------------	--	--	--	--	------



TRANS-2-HEPTENE			
METHYLCYCLOHEXANE	0.15	0.15	0.72
2,5-DIMETHYLHEXANE			0.45
4-METHYLCYCLOHEXENE			0.22
1-CHLOROPENTANE			0.33
1,1,2-TRICHLOROETHANE			
TOLUENE	2.03	1.39	5.53
1,3-DICHLOROPROPANE			
2-METHYLHEPTANE			
1,2-DIBROMOETHANE			
1-OCTENE			0.20
TRANS-1,2-DIMETHYLCYCLOHEXANE			0.08
TRANS-4-OCTENE			
TETRACHLOROETHYLENE			0.55
OCTANE			0.49
2-METHYL-1-HEPTENE			
2-OCTENE			
CIS-1,2-DIMETHYLCYCLOHEXANE			
CHLOROBENZENE			
PROPYLCYCLOPENTANE			
ETHYLCYCLOHEXANE			0.23
1-CHLOROHXANE			
ETHYLBENZENE			1.15
M-XYLENE + P-XYLENE	0.57	0.57	2.78
STYRENE			
1,4-DICHLOROBUTANE			
O-XYLENE	0.18		0.92
1,1,2,2-TETRACHLOROETHANE			
1,2,3-TRICHLOROPROPANE			
1-NONENE			
NONANE	0.10		0.35
ISOPROPYLBENZENE			0.12
2-CHLOROTOLUENE			
3-CHLOROTOLUENE			
N-PROPYLBENZENE			0.20
4-CHLOROTOLUENE			0.27
3-ETHYLTOLUENE	0.13		0.69
4-ETHYLTOLUENE			
1,3,5-TRIMETHYLBENZENE			0.43
2-ETHYLTOLUENE			0.28
T-BUTYLBENZENE			0.72
1,2,4-TRIMETHYLBENZENE			1.25
1,3-DICHLOROBENZENE			
1-DECENE			
A-CHLOROTOLUENE			
1,5-DICHLOROPENTANE			
DECANE			0.35
SEC. BUTYLBENZENE			
3-(CHLOROMETHYL)-HEPTANE			
1,2,3-TRIMETHYLBENZENE			
1-ISOPROPYL-4-METHYLBENZENE			
1,2-DICHLOROBENZENE			
INDAN			
N-BUTYLCYCLOHEXANE			
1,3-DIETHYLBENZENE			
1,4-DIETHYLBENZENE			
N-BUTYLBENZENE			
1,2-DIETHYLBENZENE			
DECALIN			
UNDECANE			
1,2,3,5-TETRAMETHYLBENZENE			
DIISOPROPYLBENZENE			
1,2,3,4-TETRAMETHYLBENZENE			
TETRALIN			
DODECANE			

Total hydrocarbons ug/m3:	38.12	22.24	66.58
Alkanes ug/m3	23.94	17.18	40.54
Cycloalkanes ug/m3	0.59	0.51	2.61
Alkenes ug/m3	0.80	0.07	0.30
Cycloalkenes ug/m3	0.00	0.00	0.22
Alkynes ug/m3	0.00	0.00	0.00
Aromatics ug/m3	9.04	4.43	21.76
Chlorinated alkanes ug/m3	3.70	0.00	0.33
Chlorinated alkenes ug/m3	0.05	0.05	0.55
Chlorinated aromatics ug/m3	0.00	0.00	0.27

Total # of compounds identified	25	20	38
---------------------------------	----	----	----

Total # of peaks	94	52	98
------------------	----	----	----

Total area of peaks	3216.76	1401.50	4612.50
---------------------	---------	---------	---------

Area of identified peaks	1568.30	902.00	2588.00
--------------------------	---------	--------	---------

Area % identified peaks	49	64	56
-------------------------	----	----	----

Toluene:Ethylbenzene			4.81
----------------------	--	--	------

Benzene:Ethylbenzene			6.69
----------------------	--	--	------

Xylenes:Ethylbenzene			3.22
----------------------	--	--	------

Ethylbenzene:Ethylbenzene			1.00
---------------------------	--	--	------

## SURVEY NAME

LONDON AUGUST-SEPTEMBER 1984

units ug/m3

DATE: SEPTEMBER 7/84

.....

MANU LOCATION #	072A	072A
-----------------	------	------

TIME PERIOD                    1038-1138  
    1138-1238

PROPANE	3.48	7.96
PROPADIENE		
PROPYNE		
CHLOROMETHANE		0.65
CYCLOPROPANE		0.65
ISOBUTANE		3.63
VINYL CHLORIDE		
1-BUTENE		
1,3-BUTADIENE		
BUTANE	5.83	8.52
1-BUTYNE		1.23
CHLOROETHANE		
3-METHYL-1-BUTENE		
2-METHYLBUTANE		6.52
1-PENTENE		
PENTANE	2.14	2.57
ISOPRENE		
TRANS-2-PENTENE		
DICHLOROMETHANE		
2-METHYL-2-BUTENE		
2-CHLORO-2-METHYLBUTANE		
3-CHLOROPROPENE		
2,2-DIMETHYLBUTANE		
3-METHYL-1-PENTENE		
2,3-DIMETHYLBUTANE	0.81	0.58
3-METHYLPENTANE		1.05
1-HEXENE		
CIS-1,2-DICHLOROETHYLENE		
2-CHLOROBUTANE		
HEXANE		1.64
CHLOROFORM		
TRANS-3-HEXENE		
3-CHLORO-2-METHYLPROPENE		
METHYLCYCLOPENTANE		0.52
1,2-DICHLOROETHANE		
1,1,1-TRICHLOROETHANE		
1-CHLOROBUTANE		
BENZENE	5.36	4.69
CARBON TETRACHLORIDE		
CYCLOHEXANE		
2-METHYLHEXANE		1.96
2,3-DIMETHYLPENTANE	1.11	1.07
CYCLOHEXENE		
DIBROMOMETHANE		
3-METHYLHEXANE		1.46
1,2-DICHLOROPROPANE		
2,3-DICHLOROPROPENE		
TRICHLOROETHYLENE	0.46	0.11
2,2,4-TRIMETHYLPENTANE	0.56	0.68
1-HEPTENE		
HEPTANE		0.70
1-CHLORO-3-METHYLBUTANE		

TRANS-2-HEPTENE		
METHYLCYCLOHEXANE	0.40	
2,5-DIMETHYLHEXANE		
4-METHYLCYCLOHEXENE		
1-CHLOROPENTANE	0.14	0.18
1,1,2-TRICHLOROETHANE		
TOLUENE	4.55	4.47
1,3-DICHLOROPROPANE		
2-METHYLHEPTANE		
1,2-DIBROMOETHANE		
1-OCTENE	0.11	0.15
TRANS-1,2-DIMETHYLCYCLOHEXANE		0.09
TRANS-4-OCTENE		
TETRACHLOROETHYLENE		
OCTANE		0.51
2-METHYL-1-HEPTENE		
2-OCTENE		
CIS-1,2-DIMETHYLCYCLOHEXANE	0.20	0.13
CHLOROBENZENE		
PROPYLCYCLOPENTANE		
ETHYLCYCLOHEXANE		0.26
1-CHLOROHXANE	0.18	
ETHYLBENZENE		1.97
M-XYLENE+P-XYLENE	5.28	5.46
STYRENE		
1,4-DICHLOROBUTANE	0.13	
O-XYLENE	1.80	1.76
1,1,2,2-TETRACHLOROETHANE		
1,2,3-TRICHLOROPROPANE		
1-NONENE		
NONANE		0.41
ISOPROPYLBENZENE		
2-CHLOROTOLUENE		
3-CHLOROTOLUENE		
N-PROPYLBENZENE		
4-CHLOROTOLUENE		0.29
3-ETHYLTOLUENE	0.83	0.46
4-ETHYLTOLUENE	0.46	
1,3,5-TRIMETHYLBENZENE		
2-ETHYLTOLUENE		0.18
T-BUTYLBENZENE		0.59
1,2,4-TRIMETHYLBENZENE	2.47	1.03
1,3-DICHLOROBENZENE		
1-DECENE		
A-CHLOROTOLUENE		
1,5-DICHLOROPENTANE		
DECANE		0.41
SEC. BUTYLBENZENE		
3-(CHLOROMETHYL)-HEPTANE		
1,2,3-TRIMETHYLBENZENE		
1-ISOPROPYL-4-METHYLBENZENE		
1,2-DICHLOROBENZENE		
INDAN		
N-BUTYLCYCLOHEXANE		
1,3-DIETHYLBENZENE		
1,4-DIETHYLBENZENE		
N-BUTYLBENZENE	0.08	
1,2-DIETHYLBENZENE		
DECALIN		
UNDECANE		
1,2,3,5-TETRAMETHYLBENZENE		
DIISOPROPYLBENZENE		
1,2,3,4-TETRAMETHYLBENZENE		
TETRALIN		
DODECANE		

Total hydrocarbons ug/m3:	35.98	64.94
Alkanes ug/m3	13.93	39.67
Cycloalkanes ug/m3	0.20	2.05
Alkenes ug/m3	0.11	0.15
Cycloalkenes ug/m3	0.00	0.00
Alkynes ug/m3	0.00	1.23
Aromatics ug/m3	20.83	20.61
Chlorinated alkanes ug/m3	0.45	0.83
Chlorinated alkenes ug/m3	0.46	0.11
Chlorinated aromatics ug/m3	0.00	0.29

Total # of compounds identified	20	37
---------------------------------	----	----

Total # of peaks	120	88
------------------	-----	----

Total area of peaks	4000.00	3921.50
---------------------	---------	---------

Area of identified peaks	1400.00	2631.40
--------------------------	---------	---------

Area % identified peaks	35	67
-------------------------	----	----

Toluene:Ethylbenzene	2.27	
----------------------	------	--

Benzene:Ethylbenzene	2.38	
----------------------	------	--

Xylenes:Ethylbenzene	3.66	
----------------------	------	--

Ethylbenzene:Ethylbenzene	1.00	
---------------------------	------	--



SURVEY NAME

LONDON AUGUST-SEPTEMBER 1984

MAMU#2

DATE: AUGUST 27/84

units ug/m3

MAMU LOCATION #

271B

TIME PERIOD

1645-1745

PROPANE  
PROPADIENE  
PROPYNE  
CHLOROMETHANE  
CYCLOPROPANE  
ISOBUTANE  
VINYL CHLORIDE  
1-BUTENE  
1,3-BUTADIENE  
BUTANE  
1-BUTYNE  
CHLOROETHANE  
3-METHYL-1-BUTENE  
2-METHYLBUTANE  
1-PENTENE  
PENTANE  
ISOPRENE  
TRANS-2-PENTENE  
DICHLOROMETHANE  
2-METHYL-2-BUTENE  
2-CHLORO-2-METHYLBUTANE  
3-CHLOROPROPENE  
2,2-DIMETHYLBUTANE  
3-METHYL-1-PENTENE  
2,3-DIMETHYLBUTANE  
3-METHYLPENTANE  
1-HEXENE  
CIS-1,2-DICHLOROETHYLENE  
2-CHLOROBUTANE  
HEXANE  
CHLOROFORM  
TRANS-3-HEXENE  
3-CHLORO-2-METHYLPROPENE  
METHYLCYCLOPENTANE  
1,2-DICHLOROETHANE  
1,1,1-TRICHLOROETHANE  
1-CHLOROBUTANE  
BENZENE  
CARBON TETRACHLORIDE  
CYCLOHEXANE  
2-METHYLHEXANE  
2,3-DIMETHYLPENTANE  
CYCLOHEXENE  
DIBROMOMETHANE  
3-METHYLHEXANE  
1,2-DICHLOROPROPANE  
2,3-DICHLOROPROPENE  
TRICHLOROETHYLENE  
2,2,4-TRIMETHYLPENTANE  
1-HEPTENE  
HEPTANE  
1-CHLORO-3-METHYLBUTANE

0.77

1.12

0.61

0.19

0.37

0.72

0.20

TRANS-2-HEPTENE  
 METHYLCYCLOHEXANE  
 2,5-DIMETHYLHEXANE  
 4-METHYLCYCLOHEXENE  
 1-CHLOROPENTANE  
 1,1,2-TRICHLOROETHANE  
 TOLUENE 1.56  
 1,3-DICHLOROPROPANE  
 2-METHYLHEPTANE  
 1,2-DIBROMOETHANE  
 1-OCTENE  
 TRANS-1,2-DIMETHYLCYCLOHEXANE  
 TRANS-4-OCTENE  
 TETRACHLOROETHYLENE  
 OCTANE  
 2-METHYL-1-HEPTENE  
 2-OCTENE  
 CIS-1,2-DIMETHYLCYCLOHEXANE  
 CHLOROBENZENE  
 PROPYLCYCLOPENTANE  
 ETHYLCYCLOHEXANE  
 1-CHLOROHEXANE  
 ETHYLBENZENE 0.24  
 M-XYLENE+P-XYLENE 0.90  
 STYRENE  
 1,4-DICHLOROBUTANE  
 O-XYLENE 0.27  
 1,1,2,2-TETRACHLOROETHANE  
 1,2,3-TRICHLOROPROPANE  
 1-NONENE  
 NONANE  
 ISOPROPYLBENZENE  
 2-CHLOROTOLUENE  
 3-CHLOROTOLUENE  
 N-PROPYLBENZENE  
 4-CHLOROTOLUENE  
 3-ETHYLTOLUENE  
 4-ETHYLTOLUENE  
 1,3,5-TRIMETHYLBENZENE  
 2-ETHYLTOLUENE  
 T-BUTYLBENZENE  
 1,2,4-TRIMETHYLBENZENE  
 1,3-DICHLOROBENZENE  
 1-DECENE  
 A-CHLOROTOLUENE  
 1,5-DICHLOROPENTANE  
 DECANE  
 SEC-BUTYLBENZENE  
 3-(CHLOROMETHYL)-HEPTANE  
 1,2,3-TRIMETHYLBENZENE  
 1-ISOPROPYL-4-METHYLBENZENE  
 1,2-DICHLOROBENZENE  
 INDAN  
 N-BUTYLCYCLOHEXANE  
 1,3-DIETHYLBENZENE  
 1,4-DIETHYLBENZENE  
 N-BUTYLBENZENE  
 1,2-DIETHYLBENZENE  
 DECALIN  
 UNDECANE 0.24  
 1,2,3,5-TETRAMETHYLBENZENE  
 DIISOPROPYLBENZENE  
 1,2,3,4-TETRAMETHYLBENZENE  
 TETRALIN  
 DODECANE 1.27

Total hydrocarbons ug/m3:	8.46
Alkanes ug/m3	4.77
Cycloalkanes ug/m3	0.00
Alkenes ug/m3	0.00
Cycloalkenes ug/m3	0.00
Alkynes ug/m3	0.00
Aromatics ug/m3	3.69
Chlorinated alkanes ug/m3	0.00
Chlorinated alkenes ug/m3	0.00
Chlorinated aromatics ug/m3	0.00

Total # of compounds identified	13
------------------------------------	----

Total # of peaks	20
------------------	----

Total area of peaks	1227.08
---------------------	---------

Area of identified peaks	346.70
--------------------------	--------

Area % identified peaks	28
-------------------------	----

Toluene:Ethylbenzene	6.50
----------------------	------

Benzene:Ethylbenzene	3.00
----------------------	------

Xylenes:Ethylbenzene	4.87
----------------------	------

Ethylbenzene:Ethylbenzene	1.00
---------------------------	------

12

LONDON AUGUST-SEPTEMBER 1984

DATE: AUGUST 28/84

DATE: AUGUST 28/84

~~~~~

|                 |      |      |
|-----------------|------|------|
| NAMU LOCATION # | 283B | 283B |
|-----------------|------|------|

TIME PERIOD                      1504-1604  
                                              1604-1704

|                          |       |       |
|--------------------------|-------|-------|
| PROPANE                  |       | 6.32  |
| PROPADIENE               |       |       |
| PROPYNE                  |       |       |
| CHLOROMETHANE            |       |       |
| CYCLOPROPANE             |       |       |
| ISOBUTANE                |       | 21.29 |
| VINYL CHLORIDE           |       |       |
| 1-BUTENE                 | 3.11  |       |
| 1,3-BUTADIENE            | 0.47  |       |
| BUTANE                   | 66.89 | 59.77 |
| 1-BUTYNE                 |       |       |
| CHLOROETHANE             |       |       |
| 3-METHYL-1-BUTENE        | 0.55  | 0.88  |
| 2-METHYLBUTANE           | 76.31 | 88.61 |
| 1-PENTENE                | 1.39  | 2.00  |
| PENTANE                  | 42.05 | 46.27 |
| ISOPRENE                 |       |       |
| TRANS-2-PENTENE          | 3.27  | 4.45  |
| DICHLOROMETHANE          |       | 2.57  |
| 2-METHYL-2-BUTENE        | 1.26  | 3.76  |
| 2-CHLORO-2-METHYLBUTANE  | 1.36  | 4.05  |
| 3-CHLOROPROPENE          |       |       |
| 2,2-DIMETHYLBUTANE       | 1.76  | 1.83  |
| 3-METHYL-1-PENTENE       | 0.31  |       |
| 2,3-DIMETHYLBUTANE       | 3.63  | 3.22  |
| 3-METHYLPENTANE          | 12.43 | 8.60  |
| 1-HEXENE                 | 0.73  |       |
| CIS-1,2-DICHLOROETHYLENE |       |       |
| 2-CHLOROBUTANE           |       |       |
| HEXANE                   | 25.44 | 12.23 |
| CHLOROFORM               |       |       |
| TRANS-3-HEXENE           | 0.79  | 0.46  |
| 3-CHLORO-2-METHYLPROPENE |       |       |
| METHYLCYCLOPENTANE       | 5.33  | 4.82  |
| 1,2-DICHLOROETHANE       |       |       |
| 1,1,1-TRICHLOROETHANE    |       | 2.01  |
| 1-CHLOROBUTANE           |       |       |
| BENZENE                  | 8.90  | 5.68  |
| CARBON TETRACHLORIDE     |       |       |
| CYCLOHEXANE              | 0.81  | 0.85  |
| 2-METHYLHEXANE           | 24.06 | 9.09  |
| 2,3-DIMETHYLPENTANE      |       |       |
| CYCLOHEXENE              |       |       |
| DIBROMOMETHANE           |       |       |
| 3-METHYLHEXANE           | 19.32 | 6.71  |
| 1,2-DICHLOROPROPANE      |       |       |
| 2,3-DICHLOROPROPENE      |       |       |
| TRICHLOROETHYLENE        |       |       |
| 2,2,4-TRIMETHYLPENTANE   | 2.47  | 1.72  |
| 1-HEPTENE                |       |       |
| HEPTANE                  | 8.01  | 2.30  |
| 1-CHLORO-3-METHYLBUTANE  |       |       |

|                               |       |       |
|-------------------------------|-------|-------|
| TRANS-2-HEPTENE               | 0.60  |       |
| METHYLCYCLOHEXANE             | 2.89  | 1.13  |
| 2,5-DIMETHYLHEXANE            | 1.71  | 0.69  |
| 4-METHYLCYCLOHEXENE           | 1.15  |       |
| 1-CHLOROPENTANE               |       |       |
| 1,1,2-TRICHLOROETHANE         |       |       |
| TOLUENE                       | 50.12 | 12.01 |
| 1,3-DICHLOROPROPANE           |       |       |
| 2-METHYLHEPTANE               | 2.97  |       |
| 1,2-DIBROMOETHANE             |       |       |
| 1-OCTENE                      | 1.03  |       |
| TRANS-1,2-DIMETHYLCYCLOHEXANE |       |       |
| TRANS-4-OCTENE                |       |       |
| TETRACHLOROETHYLENE           | 1.67  |       |
| OCTANE                        | 2.72  | 1.18  |
| 2-METHYL-1-HEPTENE            |       |       |
| 2-OCTENE                      |       |       |
| CIS-1,2-DIMETHYLCYCLOHEXANE   |       |       |
| CHLOROBENZENE                 |       |       |
| PROPYLCYCLOPENTANE            |       |       |
| ETHYLCYCLOHEXANE              | 1.24  | 0.77  |
| 1-CHLOROHXANE                 |       |       |
| ETHYLBENZENE                  | 8.93  | 2.01  |
| M-XYLENE+P-XYLENE             | 30.65 | 6.25  |
| STYRENE                       |       |       |
| 1,4-DICHLOROBUTANE            |       |       |
| O-XYLENE                      | 7.66  | 1.85  |
| 1,1,2,2-TETRACHLOROETHANE     |       |       |
| 1,2,3-TRICHLOROPROPANE        | 2.23  |       |
| 1-NONENE                      |       |       |
| NONANE                        | 1.69  | 0.60  |
| ISOPROPYLBENZENE              | 0.98  |       |
| 2-CHLOROTOLUENE               |       |       |
| 3-CHLOROTOLUENE               |       |       |
| N-PROPYLBENZENE               | 2.07  | 0.45  |
| 4-CHLOROTOLUENE               |       |       |
| 3-ETHYLTOLUENE                | 4.88  |       |
| 4-ETHYLTOLUENE                |       |       |
| 1,3,5-TRIMETHYLBENZENE        | 4.25  | 0.69  |
| 2-ETHYLTOLUENE                | 5.01  | 0.87  |
| T-BUTYLBENZENE                | 17.44 |       |
| 1,2,4-TRIMETHYLBENZENE        | 14.06 |       |
| 1,3-DICHLOROBENZENE           |       |       |
| 1-DECENE                      |       |       |
| A-CHLOROTOLUENE               |       |       |
| 1,5-DICHLOROPENTANE           |       |       |
| DECANE                        | 2.95  |       |
| SEC. BUTYLBENZENE             |       |       |
| 3-(CHLOROMETHYL)-HEPTANE      |       |       |
| 1,2,3-TRIMETHYLBENZENE        |       |       |
| 1-ISOPROPYL-4-METHYLBENZENE   |       |       |
| 1,2-DICHLOROBENZENE           |       |       |
| INDAN                         |       |       |
| N-BUTYLCYCLOHEXANE            |       |       |
| 1,3-DIETHYLBENZENE            | 0.37  |       |
| 1,4-DIETHYLBENZENE            | 0.85  |       |
| N-BUTYLBENZENE                | 1.58  |       |
| 1,2-DIETHYLBENZENE            |       |       |
| DECALIN                       |       |       |
| UNDECANE                      |       |       |
| 1,2,3,5-TETRAMETHYLBENZENE    |       |       |
| DIISOPROPYLBENZENE            |       |       |
| 1,2,3,4-TETRAMETHYLBENZENE    |       |       |
| TETRALIN                      |       |       |
| DODECANE                      |       |       |

|                             |        |        |
|-----------------------------|--------|--------|
| Total hydrocarbons ug/m3:   | 482.35 | 327.99 |
| Alkanes ug/m3               | 294.41 | 270.43 |
| Cycloalkanes ug/m3          | 10.27  | 7.57   |
| Alkenes ug/m3               | 13.51  | 11.55  |
| Cycloalkenes ug/m3          | 1.15   | 0.00   |
| Alkynes ug/m3               | 0.00   | 0.00   |
| Aromatics ug/m3             | 157.75 | 29.81  |
| Chlorinated alkanes ug/m3   | 3.59   | 8.63   |
| Chlorinated alkenes ug/m3   | 1.67   | 0.00   |
| Chlorinated aromatics ug/m3 | 0.00   | 0.00   |

|                                 |    |    |
|---------------------------------|----|----|
| Total # of compounds identified | 50 | 36 |
|---------------------------------|----|----|

|                  |     |    |
|------------------|-----|----|
| Total # of peaks | 115 | 70 |
|------------------|-----|----|

|                     |          |          |
|---------------------|----------|----------|
| Total area of peaks | 28156.00 | 16717.00 |
|---------------------|----------|----------|

|                          |          |          |
|--------------------------|----------|----------|
| Area of identified peaks | 20648.00 | 13860.00 |
|--------------------------|----------|----------|

|                         |    |    |
|-------------------------|----|----|
| Area % identified peaks | 73 | 83 |
|-------------------------|----|----|

|                      |      |      |
|----------------------|------|------|
| Toluene:Ethylbenzene | 5.61 | 5.98 |
|----------------------|------|------|

|                      |      |      |
|----------------------|------|------|
| Benzene:Ethylbenzene | 1.00 | 2.83 |
|----------------------|------|------|

|                      |      |      |
|----------------------|------|------|
| Xylenes:Ethylbenzene | 4.29 | 4.03 |
|----------------------|------|------|

|                           |      |      |
|---------------------------|------|------|
| Ethylbenzene:Ethylbenzene | 1.00 | 1.00 |
|---------------------------|------|------|

LONDON AUGUST-SEPTEMBER 1984

DATE: AUGUST 30/84

MAMU LOCATION #

303B

1734-1834

1634-1734

| NAME                     | Wt. % | Wt. % | Wt. % |
|--------------------------|-------|-------|-------|
| PROPANE                  | 4.58  | 16.12 | 1.14  |
| PROPADIENE               |       |       |       |
| PROPYNE                  |       |       |       |
| CHLOROMETHANE            | 0.54  |       | 0.53  |
| CYCLOPROPANE             |       |       |       |
| ISOBUTANE                | 3.50  | 1.75  | 1.55  |
| VINYL CHLORIDE           |       |       |       |
| 1-BUTENE                 |       |       |       |
| 1,3-BUTADIENE            |       |       |       |
| BUTANE                   | 5.99  | 6.45  | 4.91  |
| 1-BUTYNE                 |       |       |       |
| CHLOROETHANE             |       |       |       |
| 3-METHYL-1-BUTENE        |       |       |       |
| 2-METHYLBUTANE           | 8.12  | 8.87  | 7.59  |
| 1-PENTENE                |       |       |       |
| PENTANE                  | 3.93  | 6.54  | 3.83  |
| ISOPRENE                 |       |       |       |
| TRANS-2-PENTENE          | 0.41  | 0.47  | 0.43  |
| DICHLOROMETHANE          |       |       |       |
| 2-METHYL-2-BUTENE        |       | 0.34  | 0.32  |
| 2-CHLORO-2-METHYLBUTANE  |       | 0.37  | 0.35  |
| 3-CHLOROPROPENE          |       |       |       |
| 2,2-DIMETHYLBUTANE       |       | 0.82  | 0.30  |
| 3-METHYL-1-PENTENE       |       |       |       |
| 2,3-DIMETHYLBUTANE       | 0.66  | 0.73  | 0.60  |
| 3-METHYLPENTANE          | 1.19  | 1.40  | 1.12  |
| 1-HEXENE                 |       |       |       |
| CIS-1,2-DICHLOROETHYLENE |       |       |       |
| 2-CHLOROBUTANE           |       |       |       |
| HEXANE                   | 1.66  | 1.83  | 1.45  |
| CHLOROFORM               |       |       |       |
| TRANS-3-HEXENE           |       |       |       |
| 3-CHLORO-2-METHYLPROPENE |       |       |       |
| METHYLCYCLOPENTANE       | 0.61  | 0.55  | 0.45  |
| 1,2-DICHLOROETHANE       |       |       |       |
| 1,1,1-TRICHLOROETHANE    |       | 1.29  |       |
| 1-CHLOROBUTANE           |       |       |       |
| BENZENE                  | 2.24  | 19.75 | 1.26  |
| CARBON TETRACHLORIDE     |       |       |       |
| CYCLOHEXANE              |       |       |       |
| 2-METHYLHEXANE           | 1.95  | 1.68  | 1.65  |
| 2,3-DIMETHYLPENTANE      |       | 0.91  | 0.90  |
| CYCLOHEXENE              |       |       |       |
| DIBROMOMETHANE           |       |       |       |
| 3-METHYLHEXANE           | 1.43  | 1.46  | 1.20  |
| 1,2-DICHLOROPROPANE      |       |       |       |
| 2,3-DICHLOROPROPENE      |       |       |       |
| TRICHLOROETHYLENE        |       |       |       |
| 2,2,4-TRIMETHYLPENTANE   | 0.93  | 0.60  | 0.53  |
| 1-HEPTENE                |       |       |       |
| HEPTANE                  | 0.59  | 0.51  | 0.46  |
| 1-CHLORO-3-METHYLBUTANE  |       |       |       |

|                               |      |      |      |
|-------------------------------|------|------|------|
| TRANS-2-HEPTENE               |      |      |      |
| METHYLCYCLOHEXANE             | 0.29 | 0.22 | 0.24 |
| 2,5-DIMETHYLHEXANE            | 0.30 |      |      |
| 4-METHYLCYCLOHEXENE           |      |      |      |
| 1-CHLOROPENTANE               |      |      |      |
| 1,1,2-TRICHLOROETHANE         |      |      |      |
| TOLUENE                       | 5.16 | 5.29 | 2.64 |
| 1,3-DICHLOROPROPANE           |      |      |      |
| 2-METHYLHEPTANE               |      |      |      |
| 1,2-DIBROMOETHANE             |      |      |      |
| 1-OCTENE                      |      |      |      |
| TRANS-1,2-DIMETHYLCYCLOHEXANE |      |      |      |
| TRANS-4-OCTENE                |      |      |      |
| TETRACHLOROETHYLENE           | 0.92 | 0.68 |      |
| OCTANE                        | 0.36 | 0.35 | 0.27 |
| 2-METHYL-1-HEPTENE            |      |      |      |
| 2-OCTENE                      |      |      |      |
| CIS-1,2-DIMETHYLCYCLOHEXANE   |      |      |      |
| CHLOROBENZENE                 |      |      |      |
| PROPYLCYCLOPENTANE            |      |      |      |
| ETHYLCYCLOHEXANE              |      |      |      |
| 1-CHLOROHXANE                 |      |      |      |
| ETHYLBENZENE                  | 0.79 | 1.20 | 0.36 |
| M-XYLENE+P-XYLENE             | 2.24 | 3.66 | 0.97 |
| STYRENE                       |      |      |      |
| 1,4-DICHLOROBUTANE            |      |      |      |
| O-XYLENE                      | 0.69 | 1.08 | 0.32 |
| 1,1,2,2-TETRACHLOROETHANE     |      |      |      |
| 1,2,3-TRICHLOROPROPANE        |      |      |      |
| 1-NONENE                      |      |      |      |
| NONANE                        | 0.16 | 0.14 | 0.12 |
| ISOPROPYLBENZENE              |      |      |      |
| 2-CHLOROTOLUENE               |      |      |      |
| 3-CHLOROTOLUENE               |      |      |      |
| N-PROPYLBENZENE               | 0.14 | 0.19 |      |
| 4-CHLOROTOLUENE               |      |      |      |
| 3-ETHYLTOLUENE                |      |      | 0.39 |
| 4-ETHYLTOLUENE                |      |      |      |
| 1,3,5-TRIMETHYLBENZENE        | 0.20 | 0.16 |      |
| 2-ETHYLTOLUENE                | 0.29 | 0.27 |      |
| T-BUTYLBENZENE                |      |      |      |
| 1,2,4-TRIMETHYLBENZENE        |      |      |      |
| 1,3-DICHLOROBENZENE           |      |      |      |
| 1-DECENE                      |      |      |      |
| A-CHLOROTOLUENE               |      |      |      |
| 1,5-DICHLOROPENTANE           |      |      |      |
| DECANE                        |      |      |      |
| SEC. BUTYLBENZENE             |      |      |      |
| 3-(CHLOROMETHYL)-HEPTANE      |      |      |      |
| 1,2,3-TRIMETHYLBENZENE        | 0.19 |      |      |
| 1-ISOPROPYL-4-METHYLBENZENE   |      |      |      |
| 1,2-DICHLOROBENZENE           |      |      |      |
| INDAN                         |      |      |      |
| N-BUTYLCYCLOHEXANE            |      |      |      |
| 1,3-DIETHYLBENZENE            |      |      |      |
| 1,4-DIETHYLBENZENE            |      |      |      |
| N-BUTYLBENZENE                |      |      |      |
| 1,2-DIETHYLBENZENE            |      |      |      |
| DECALIN                       |      |      |      |
| UNDECANE                      |      |      |      |
| 1,2,3,5-TETRAMETHYLBENZENE    |      |      |      |
| DIISOPROPYLBENZENE            |      |      |      |
| 1,2,3,4-TETRAMETHYLBENZENE    |      |      |      |
| TETRALIN                      |      |      |      |
| DODECANE                      |      |      |      |



|                                 |         |         |         |
|---------------------------------|---------|---------|---------|
| Total hydrocarbons ug/m3:       | 50.06   | 85.68   | 35.88   |
| Alkanes ug/m3                   | 35.35   | 50.16   | 27.62   |
| Cycloalkanes ug/m3              | 0.90    | 0.77    | 0.69    |
| Alkenes ug/m3                   | 0.41    | 0.81    | 0.75    |
| Cycloalkenes ug/m3              | 0.00    | 0.00    | 0.00    |
| Alkynes ug/m3                   | 0.00    | 0.00    | 0.00    |
| Aromatics ug/m3                 | 11.94   | 31.60   | 5.94    |
| Chlorinated alkanes ug/m3       | 0.54    | 1.66    | 0.88    |
| Chlorinated alkenes ug/m3       | 0.92    | 0.68    | 0.00    |
| Chlorinated aromatics ug/m3     | 0.00    | 0.00    | 0.00    |
|                                 |         |         |         |
| Total # of compounds identified | 29      | 31      | 28      |
|                                 |         |         |         |
| Total # of peaks                | 48      | 58      | 40      |
|                                 |         |         |         |
| Total area of peaks             | 3228.50 | 5231.50 | 2263.50 |
|                                 |         |         |         |
| Area of identified peaks        | 2186.50 | 3867.00 | 1539.00 |
|                                 |         |         |         |
| Area % identified peaks         | 68      | 74      | 68      |
|                                 |         |         |         |
| Toluene:Ethylbenzene            | 6.53    | 4.41    | 7.33    |
| Benzene:Ethylbenzene            | 2.84    | 16.46   | 3.50    |
| Xylenes:Ethylbenzene            | 3.71    | 3.95    | 3.58    |
| Ethylbenzene:Ethylbenzene       | 1.00    | 1.00    | 1.00    |

## SURVEY NAME

LONDON AUGUST-SEPTEMBER 1984

MAMU#2

DATE: AUGUST 31/84

units ug/m3

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

MAMU LOCATION #

312B

312B

313B

313B

313B

TIME PERIOD

1011-1111

1244-1344

1444-1544

1111-1211

1344-1444

|                          |       |       |      |      |      |
|--------------------------|-------|-------|------|------|------|
| PROPANE                  | 2.65  | 2.64  | 1.53 |      | 2.07 |
| PROPADIENE               |       |       |      |      |      |
| PROPYNE                  |       |       |      |      |      |
| CHLOROMETHANE            | 0.50  |       | 0.46 |      | 0.38 |
| CYCLOPROPANE             |       |       |      |      |      |
| ISOBUTANE                | 3.23  | 3.00  | 0.68 |      | 0.60 |
| VINYL CHLORIDE           |       |       |      |      |      |
| 1-BUTENE                 | 1.06  |       |      |      |      |
| 1,3-BUTADIENE            |       |       |      |      |      |
| BUTANE                   | 12.12 | 11.73 | 2.19 | 2.01 | 2.05 |
| 1-BUTYNE                 |       |       |      |      |      |
| CHLOROETHANE             |       |       |      |      |      |
| 3-METHYL-1-BUTENE        |       |       |      |      |      |
| 2-METHYLBUTANE           | 19.46 | 15.48 | 3.83 | 3.24 | 3.29 |
| 1-PENTENE                |       |       |      |      |      |
| PENTANE                  |       | 8.43  | 2.25 | 1.29 | 1.85 |
| ISOPRENE                 |       |       | 0.94 | 0.63 |      |
| TRANS-2-PENTENE          |       | 0.91  | 0.26 | 0.25 |      |
| DICHLOROMETHANE          |       | 0.78  |      |      |      |
| 2-METHYL-2-BUTENE        |       | 0.94  |      | 0.17 |      |
| 2-CHLORO-2-METHYLBUTANE  |       | 1.02  | 0.22 | 0.19 |      |
| 3-CHLOROPROPENE          |       |       |      |      |      |
| 2,2-DIMETHYLBUTANE       |       | 0.85  | 0.18 | 0.35 |      |
| 3-METHYL-1-PENTENE       |       |       |      |      |      |
| 2,3-DIMETHYLBUTANE       | 1.13  | 1.33  | 0.38 | 0.27 | 0.30 |
| 3-METHYLPENTANE          | 3.06  | 2.53  | 0.80 | 0.59 | 0.60 |
| 1-HEXENE                 |       |       |      |      |      |
| CIS-1,2-DICHLOROETHYLENE |       |       |      |      |      |
| 2-CHLOROBUTANE           |       |       |      |      |      |
| HEXANE                   | 4.25  | 3.67  | 1.21 | 0.91 | 0.89 |
| CHLOROFORM               |       |       |      |      |      |
| TRANS-3-HEXENE           |       |       |      |      |      |
| 3-CHLORO-2-METHYLPROPENE |       |       |      |      |      |
| METHYLCYCLOPENTANE       | 1.60  | 1.28  | 0.37 | 0.25 |      |
| 1,2-DICHLOROETHANE       |       |       |      |      |      |
| 1,1,1-TRICHLOROETHANE    | 0.72  | 1.22  | 0.51 | 1.50 | 0.49 |
| 1-CHLOROBUTANE           |       |       |      |      |      |
| BENZENE                  | 3.01  | 7.02  | 0.84 | 3.34 | 1.39 |
| CARBON TETRACHLORIDE     |       |       |      |      |      |
| CYCLOHEXANE              |       |       |      |      |      |
| 2-METHYLHEXANE           | 4.45  | 4.25  | 1.22 | 0.95 | 0.97 |
| 2,3-DIMETHYLPENTANE      |       |       | 0.67 | 0.52 | 0.53 |
| CYCLOHEXENE              |       |       |      |      |      |
| DIBROMOMETHANE           |       |       |      |      |      |
| 3-METHYLHEXANE           | 3.37  | 3.31  | 0.97 | 0.74 | 0.73 |
| 1,2-DICHLOROPROPANE      |       |       |      |      |      |
| 2,3-DICHLOROPROPENE      |       |       |      |      |      |
| TRICHLOROETHYLENE        |       | 0.25  |      |      |      |
| 2,2,4-TRIMETHYLPENTANE   | 1.00  | 0.90  | 0.26 | 0.23 | 0.29 |
| 1-HEPTENE                |       |       |      |      |      |
| HEPTANE                  | 1.25  | 1.41  | 0.37 | 0.29 | 0.28 |
| 1-CHLORO-3-METHYLBUTANE  |       |       |      |      |      |

|                               |      |      |      |      |      |
|-------------------------------|------|------|------|------|------|
| TRANS-2-HEPTENE               |      |      |      |      |      |
| METHYLCYCLOHEXANE             | 0.58 | 0.54 | 0.15 | 0.12 | 0.13 |
| 2,5-DIMETHYLHEXANE            | 0.39 | 0.39 |      |      |      |
| 4-METHYLCYCLOHEXENE           | 0.21 | 0.23 |      |      |      |
| 1-CHLOROPENTANE               |      |      |      |      |      |
| 1,1,2-TRICHLOROETHANE         |      |      |      |      |      |
| TOLUENE                       | 7.50 | 8.48 | 1.36 | 1.01 | 1.49 |
| 1,3-DICHLOROPROPANE           |      |      |      |      |      |
| 2-METHYLHEPTANE               |      | 0.56 |      |      |      |
| 1,2-DIBROMOETHANE             |      |      |      |      |      |
| 1-OCTENE                      |      |      |      |      |      |
| TRANS-1,2-DIMETHYLCYCLOHEXANE |      |      |      |      |      |
| TRANS-4-OCTENE                |      |      |      |      |      |
| TETRACHLOROETHYLENE           | 0.85 | 0.73 |      | 0.38 |      |
| OCTANE                        | 0.54 | 0.61 | 0.15 | 0.12 | 0.13 |
| 2-METHYL-1-HEPTENE            |      |      |      |      |      |
| 2-OCTENE                      |      |      |      |      |      |
| CIS-1,2-DIMETHYLCYCLOHEXANE   |      |      |      |      |      |
| CHLOROBENZENE                 |      |      |      |      |      |
| PROPYLCYCLOPENTANE            |      |      |      |      |      |
| ETHYLCYCLOHEXANE              |      | 0.22 |      |      |      |
| 1-CHLOROHEXANE                |      |      |      |      |      |
| ETHYLBENZENE                  |      | 1.40 | 0.22 | 0.20 | 0.27 |
| M-XYLENE+P-XYLENE             |      | 4.40 | 0.67 | 0.49 | 0.63 |
| STYRENE                       |      | 0.14 |      |      |      |
| 1,4-DICHLOROBUTANE            |      |      |      |      |      |
| O-XYLENE                      |      | 1.35 | 0.21 | 0.16 | 0.22 |
| 1,1,2,2-TETRACHLOROETHANE     |      |      |      |      |      |
| 1,2,3-TRICHLOROPROPANE        |      |      |      |      |      |
| 1-NONENE                      |      |      |      |      |      |
| NONANE                        |      | 0.22 | 0.11 |      | 0.18 |
| ISOPROPYLBENZENE              |      |      |      |      |      |
| 2-CHLOROTOLUENE               |      |      |      |      |      |
| 3-CHLOROTOLUENE               |      |      |      |      |      |
| N-PROPYLBENZENE               |      | 0.28 |      |      |      |
| 4-CHLOROTOLUENE               |      |      |      |      |      |
| 3-ETHYLTOLUENE                |      | 0.49 |      |      |      |
| 4-ETHYLTOLUENE                |      |      |      |      |      |
| 1,3,5-TRIMETHYLBENZENE        |      | 0.40 |      |      |      |
| 2-ETHYLTOLUENE                |      |      |      |      |      |
| T-BUTYLBENZENE                |      |      |      |      |      |
| 1,2,4-TRIMETHYLBENZENE        |      |      |      |      |      |
| 1,3-DICHLOROBENZENE           |      |      |      |      |      |
| 1-DECENE                      |      |      |      |      |      |
| A-CHLOROTOLUENE               |      |      |      |      |      |
| 1,5-DICHLOROPENTANE           |      |      |      |      |      |
| DECANE                        |      |      |      |      |      |
| SEC. BUTYLBENZENE             |      |      |      |      |      |
| 3-(CHLOROMETHYL)-HEPTANE      |      |      |      |      |      |
| 1,2,3-TRIMETHYLBENZENE        |      |      |      |      |      |
| 1-ISOPROPYL-4-METHYLBENZENE   |      |      |      |      |      |
| 1,2-DICHLOROBENZENE           |      |      |      |      |      |
| INDAN                         |      |      |      |      |      |
| N-BUTYLCYCLOHEXANE            |      |      |      |      |      |
| 1,3-DIETHYLBENZENE            |      |      |      |      |      |
| 1,4-DIETHYLBENZENE            |      | 0.17 |      |      |      |
| N-BUTYLBENZENE                |      | 0.23 |      |      |      |
| 1,2-DIETHYLBENZENE            |      |      |      |      |      |
| DECALIN                       |      |      |      |      |      |
| UNDECANE                      |      |      |      |      |      |
| 1,2,3,5-TETRAMETHYLBENZENE    |      |      |      |      |      |
| DIISOPROPYLBENZENE            |      |      |      |      |      |
| 1,2,3,4-TETRAMETHYLBENZENE    |      |      |      |      |      |
| TETRALIN                      |      |      |      |      |      |
| DODECANE                      |      | 0.63 |      |      |      |

|                                 |         |         |         |         |         |
|---------------------------------|---------|---------|---------|---------|---------|
| Total hydrocarbons ug/m3:       | 73.96   | 93.39   | 23.01   | 20.20   | 19.76   |
| Alkanes ug/m3                   | 57.53   | 61.31   | 16.80   | 11.51   | 14.76   |
| Cycloalkanes ug/m3              | 2.18    | 2.04    | 0.52    | 0.37    | 0.13    |
| Alkenes ug/m3                   | 1.06    | 1.85    | 1.20    | 1.05    | 0.00    |
| Cycloalkenes ug/m3              | 0.21    | 0.23    | 0.00    | 0.00    | 0.00    |
| Alkynes ug/m3                   | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    |
| Aromatics ug/m3                 | 10.91   | 23.96   | 3.30    | 5.20    | 4.00    |
| Chlorinated alkanes ug/m3       | 1.22    | 3.02    | 1.19    | 1.69    | 0.87    |
| Chlorinated alkenes ug/m3       | 0.85    | 0.98    | 0.00    | 0.38    | 0.00    |
| Chlorinated aromatics ug/m3     | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    |
|                                 |         |         |         |         |         |
| Total # of compounds identified | 25      | 37      | 28      | 26      | 23      |
|                                 |         |         |         |         |         |
| Total # of peaks                | 86      | 88      | 42      | 47      | 46      |
|                                 |         |         |         |         |         |
| Total area of peaks             | 5880.00 | 5482.50 | 1525.00 | 1476.50 | 1344.00 |
|                                 |         |         |         |         |         |
| Area of identified peaks        | 3074.00 | 4097.50 | 922.00  | 828.50  | 818.50  |
|                                 |         |         |         |         |         |
| Area % identified peaks         | 52      | 75      | 60      | 56      | 61      |
|                                 |         |         |         |         |         |
| Toluene:Ethylbenzene            |         | 6.06    | 6.18    | 5.05    | 5.52    |
| Benzene:Ethylbenzene            |         | 5.01    | 3.82    | 16.70   | 5.15    |
| Xylenes:Ethylbenzene            |         | 4.11    | 4.00    | 3.25    | 3.15    |
| Ethylbenzene:Ethylbenzene       |         | 1.00    | 1.00    | 1.00    | 1.00    |

12

MAMU#2

units ug/m3

.....

|                 |      |      |      |      |
|-----------------|------|------|------|------|
| MAMU LOCATION # | 042B | 043B | 043B | 043B |
|-----------------|------|------|------|------|

|             |           |           |
|-------------|-----------|-----------|
| TIME PERIOD | 1141-1241 | 1348-1448 |
|             | 1248-1348 | 1448-1548 |

|                          |       |       |       |       |
|--------------------------|-------|-------|-------|-------|
| PROPANE                  | 7.65  | 1.97  | 14.01 | 17.45 |
| PROPADIENE               |       |       |       |       |
| PROPYNE                  |       |       |       |       |
| CHLOROMETHANE            |       |       |       |       |
| CYCLOPROPANE             |       |       |       |       |
| ISOBUTANE                |       | 3.11  | 4.53  | 7.29  |
| VINYL CHLORIDE           |       |       |       |       |
| 1-BUTENE                 | 1.74  | 1.94  | 3.68  | 4.16  |
| 1,3-BUTADIENE            | 2.09  | 1.86  | 3.94  | 4.25  |
| BUTANE                   | 6.81  | 16.16 | 17.29 | 24.76 |
| 1-BUTYNE                 |       |       |       |       |
| CHLOROETHANE             |       |       |       |       |
| 3-METHYL-1-BUTENE        | 0.30  | 0.36  | 0.51  | 0.67  |
| 2-METHYLBUTANE           | 19.43 | 26.45 | 32.19 | 41.56 |
| 1-PENTENE                | 0.63  | 0.71  | 0.94  | 1.26  |
| PENTANE                  | 11.68 | 13.47 | 17.27 | 21.42 |
| ISOPRENE                 | 0.77  | 0.73  |       | 1.49  |
| TRANS-2-PENTENE          | 1.60  | 1.74  | 2.22  | 2.74  |
| DICHLOROMETHANE          | 0.67  | 1.09  | 3.04  | 1.36  |
| 2-METHYL-2-BUTENE        | 1.55  | 1.81  | 2.27  | 3.11  |
| 2-CHLORO-2-METHYLBUTANE  | 1.67  | 1.95  | 1.92  | 3.36  |
| 3-CHLOROPROPENE          | 0.25  | 0.25  | 0.34  | 0.49  |
| 2,2-DIMETHYLBUTANE       | 0.96  | 1.02  | 1.26  | 1.49  |
| 3-METHYL-1-PENTENE       | 0.12  | 0.12  | 0.16  | 0.20  |
| 2,3-DIMETHYLBUTANE       | 2.21  | 2.17  | 2.24  | 2.60  |
| 3-METHYLPENTANE          | 4.90  | 4.43  | 6.20  | 7.05  |
| 1-HEXENE                 | 0.25  | 0.23  | 0.35  | 0.45  |
| CIS-1,2-DICHLOROETHYLENE |       |       |       |       |
| 2-CHLOROBUTANE           |       |       |       |       |
| HEXANE                   | 7.12  | 6.14  | 8.81  | 9.96  |
| CHLOROFORM               |       |       |       |       |
| TRANS-3-HEXENE           | 0.20  | 0.19  | 0.27  | 0.33  |
| 3-CHLORO-2-METHYLPROPENE |       |       |       |       |
| METHYLCYCLOPENTANE       | 2.10  | 1.89  | 2.70  | 3.04  |
| 1,2-DICHLOROETHANE       |       |       |       |       |
| 1,1,1-TRICHLOROETHANE    | 0.60  | 0.99  | 0.73  | 0.92  |
| 1-CHLOROBUTANE           |       |       |       |       |
| BENZENE                  | 5.48  | 11.34 | 6.36  | 12.01 |
| CARBON TETRACHLORIDE     |       |       |       |       |
| CYCLOHEXANE              |       |       |       |       |
| 2-METHYLHEXANE           | 7.53  | 6.33  | 9.22  | 10.35 |
| 2,3-DIMETHYLPENTANE      |       |       |       |       |
| CYCLOHEXENE              |       |       | 0.13  |       |
| DIBROMOMETHANE           |       |       |       |       |
| 3-METHYLHEXANE           | 5.99  | 4.94  | 7.40  | 8.26  |
| 1,2-DICHLOROPROPANE      |       |       |       |       |
| 2,3-DICHLOROPROPENE      | 0.49  | 0.68  | 1.04  | 0.44  |
| TRICHLOROETHYLENE        | 0.44  |       |       |       |
| 2,2,4-TRIMETHYLPENTANE   | 1.20  | 1.27  | 1.39  | 1.61  |
| 1-HEPTENE                |       |       |       |       |
| HEPTANE                  | 2.34  | 1.91  | 2.82  | 2.62  |
| 1-CHLORO-3-METHYLBUTANE  |       |       |       |       |

|                               |       |      |       |       |
|-------------------------------|-------|------|-------|-------|
| TRANS-2-HEPTENE               | 0.16  | 0.13 | 0.21  | 0.24  |
| METHYLCYCLOHEXANE             | 0.89  | 0.78 | 1.16  | 1.62  |
| 2,5-DIMETHYLHEXANE            | 0.51  | 0.47 | 0.64  | 0.86  |
| 4-METHYLCYCLOHEXENE           | 0.31  | 0.26 | 0.41  | 0.60  |
| 1-CHLOROPENTANE               | 0.19  |      | 0.29  | 0.42  |
| 1,1,2-TRICHLOROETHANE         |       |      |       |       |
| TOLUENE                       | 10.73 | 9.02 | 13.92 | 15.22 |
| 1,3-DICHLOROPROPANE           |       |      |       |       |
| 2-METHYLHEPTANE               | 0.83  | 0.64 | 1.03  | 1.46  |
| 1,2-DIBROMOETHANE             |       |      |       |       |
| 1-OCTENE                      | 0.17  | 0.15 | 0.24  | 0.44  |
| TRANS-1,2-DIMETHYLCYCLOHEXANE | 0.14  |      | 0.19  | 0.30  |
| TRANS-4-OCTENE                |       |      | 0.23  |       |
| TETRACHLOROETHYLENE           | 0.82  | 0.95 | 0.86  |       |
| OCTANE                        | 0.93  | 0.71 | 1.10  | 1.44  |
| 2-METHYL-1-HEPTENE            |       |      |       |       |
| 2-OCTENE                      |       |      |       |       |
| CIS-1,2-DIMETHYLCYCLOHEXANE   |       |      |       |       |
| CHLOROBENZENE                 |       |      |       |       |
| PROPYLCYCLOPENTANE            |       |      |       |       |
| ETHYLCYCLOHEXANE              | 0.32  | 0.25 | 0.38  | 0.54  |
| 1-CHLOROHXANE                 |       |      |       |       |
| ETHYLBENZENE                  | 1.86  | 1.64 | 2.39  | 2.58  |
| M-XYLENE + P-XYLENE           | 5.92  | 5.26 | 7.44  | 7.79  |
| STYRENE                       | 0.47  | 0.15 |       |       |
| 1,4-DICHLOROBUTANE            |       |      |       |       |
| O-XYLENE                      | 1.76  | 1.54 | 2.25  | 2.30  |
| 1,1,2,2-TETRACHLOROETHANE     |       |      |       |       |
| 1,2,3-TRICHLOROPROPANE        |       |      |       |       |
| 1-NONENE                      |       |      |       |       |
| NONANE                        | 0.37  | 0.29 | 0.47  | 0.42  |
| ISOPROPYLBENZENE              | 0.26  | 0.19 | 0.27  | 0.22  |
| 2-CHLOROTOLUENE               |       |      |       |       |
| 3-CHLOROTOLUENE               |       |      |       |       |
| N-PROPYLBENZENE               | 0.35  | 0.42 | 0.69  |       |
| 4-CHLOROTOLUENE               | 0.17  |      |       | 0.65  |
| 3-ETHYLTOLUENE                | 2.95  | 2.48 | 3.92  | 3.97  |
| 4-ETHYLTOLUENE                | 1.22  | 1.05 | 1.70  | 1.63  |
| 1,3,5-TRIMETHYLBENZENE        | 0.83  | 0.77 | 1.27  | 1.13  |
| 2-ETHYLTOLUENE                | 1.03  | 0.91 | 1.48  | 1.36  |
| T-BUTYLBENZENE                |       | 3.16 | 5.03  |       |
| 1,2,4-TRIMETHYLBENZENE        | 2.58  | 2.27 | 3.61  | 3.47  |
| 1,3-DICHLOROBENZENE           |       |      | 0.17  |       |
| 1-DECENE                      |       |      |       |       |
| A-CHLOROTOLUENE               |       |      |       |       |
| 1,5-DICHLOROPENTANE           |       |      |       |       |
| DECANE                        | 0.45  | 0.34 | 0.65  | 0.44  |
| SEC. BUTYLBENZENE             |       |      |       |       |
| 3-(CHLOROMETHYL)-HEPTANE      |       |      |       |       |
| 1,2,3-TRIMETHYLBENZENE        | 0.59  | 0.52 | 0.87  |       |
| 1-ISOPROPYL-4-METHYLBENZENE   |       |      |       |       |
| 1,2-DICHLOROBENZENE           |       |      |       |       |
| INDAN                         | 0.44  | 0.37 | 0.53  | 0.58  |
| N-BUTYLCYCLOHEXANE            |       |      |       |       |
| 1,3-DIETHYLBENZENE            | 0.11  | 0.09 | 0.16  | 0.16  |
| 1,4-DIETHYLBENZENE            |       |      |       |       |
| N-BUTYLBENZENE                |       |      |       |       |
| 1,2-DIETHYLBENZENE            |       |      |       |       |
| DECALIN                       |       |      |       |       |
| UNDECANE                      | 0.53  | 0.12 | 0.22  |       |
| 1,2,3,5-TETRAMETHYLBENZENE    |       |      |       |       |
| DIISOPROPYLBENZENE            |       |      |       |       |
| 1,2,3,4-TETRAMETHYLBENZENE    |       |      |       |       |
| TETRALIN                      |       |      |       |       |
| DODECANE                      | 1.79  |      |       |       |

|                             |        |        |        |        |
|-----------------------------|--------|--------|--------|--------|
| Total hydrocarbons ug/m3:   | 138.45 | 152.18 | 209.01 | 246.54 |
| Alkanes ug/m3               | 83.23  | 91.94  | 128.74 | 161.04 |
| Cycloalkanes ug/m3          | 3.45   | 2.92   | 4.43   | 5.50   |
| Alkenes ug/m3               | 9.58   | 9.97   | 15.02  | 19.34  |
| Cycloalkenes ug/m3          | 0.31   | 0.26   | 0.54   | 0.60   |
| Alkynes ug/m3               | 0.00   | 0.00   | 0.00   | 0.00   |
| Aromatics ug/m3             | 36.58  | 41.18  | 51.89  | 52.42  |
| Chlorinated alkanes ug/m3   | 3.13   | 4.03   | 5.98   | 6.06   |
| Chlorinated alkenes ug/m3   | 2.00   | 1.88   | 2.24   | 0.93   |
| Chlorinated aromatics ug/m3 | 0.17   | 0.00   | 0.17   | 0.65   |

|                                 |    |    |    |    |
|---------------------------------|----|----|----|----|
| Total # of compounds identified | 61 | 58 | 61 | 55 |
|---------------------------------|----|----|----|----|

|                  |     |     |     |     |
|------------------|-----|-----|-----|-----|
| Total # of peaks | 112 | 103 | 122 | 106 |
|------------------|-----|-----|-----|-----|

|                     |         |         |          |          |
|---------------------|---------|---------|----------|----------|
| Total area of peaks | 6984.57 | 8152.64 | 11212.00 | 12810.00 |
|---------------------|---------|---------|----------|----------|

|                          |         |         |         |          |
|--------------------------|---------|---------|---------|----------|
| Area of identified peaks | 5710.25 | 6335.40 | 8393.63 | 10228.50 |
|--------------------------|---------|---------|---------|----------|

|                         |    |    |    |    |
|-------------------------|----|----|----|----|
| Area % identified peaks | 82 | 78 | 75 | 80 |
|-------------------------|----|----|----|----|

|                      |      |      |      |      |
|----------------------|------|------|------|------|
| Toluene:Ethylbenzene | 5.77 | 5.50 | 5.82 | 5.90 |
|----------------------|------|------|------|------|

|                      |      |      |      |      |
|----------------------|------|------|------|------|
| Benzene:Ethylbenzene | 2.95 | 6.91 | 2.66 | 4.66 |
|----------------------|------|------|------|------|

|                      |      |      |      |      |
|----------------------|------|------|------|------|
| Xylenes:Ethylbenzene | 4.13 | 4.15 | 4.05 | 3.91 |
|----------------------|------|------|------|------|

|                           |      |      |      |      |
|---------------------------|------|------|------|------|
| Ethylbenzene:Ethylbenzene | 1.00 | 1.00 | 1.00 | 1.00 |
|---------------------------|------|------|------|------|

LONDON AUGUST-SEPTEMBER 1984

DATE: SEPTEMBER 5/84

.....

| TIME PERIOD | 1058-1158 | 1258-1358 | 1539-1639 |
|-------------|-----------|-----------|-----------|
|             | 1158-1258 | 1439-1539 |           |

|                          |      |       |      |       |      |
|--------------------------|------|-------|------|-------|------|
| PROPANE                  | 0.89 | 11.75 | 1.92 | 2.13  | 4.89 |
| PROPADIENE               |      | 0.29  |      |       |      |
| PROPYNE                  |      |       |      |       |      |
| CHLOROMETHANE            | 0.46 |       | 0.37 |       | 0.47 |
| CYCLOPROPANE             |      |       |      |       |      |
| ISOBUTANE                | 1.10 | 0.95  | 1.06 | 2.27  | 0.95 |
| VINYL CHLORIDE           |      |       |      |       |      |
| 1-BUTENE                 |      |       |      |       |      |
| 1,3-BUTADIENE            |      |       |      |       |      |
| BUTANE                   | 3.83 | 2.82  | 3.55 | 7.84  | 2.96 |
| 1-BUTYNE                 |      |       |      |       |      |
| CHLOROETHANE             |      |       |      |       |      |
| 3-METHYL-1-BUTENE        |      |       |      |       |      |
| 2-METHYLBUTANE           | 5.52 | 4.25  | 5.81 | 12.01 | 3.92 |
| 1-PENTENE                |      |       |      |       |      |
| PENTANE                  | 3.00 | 2.15  | 2.95 | 5.62  | 1.92 |
| ISOPRENE                 |      |       |      |       |      |
| TRANS-2-PENTENE          | 0.43 | 0.33  | 0.40 | 0.43  | 0.24 |
| DICHLOROMETHANE          | 0.85 | 0.65  | 0.58 |       |      |
| 2-METHYL-2-BUTENE        | 0.50 | 0.29  | 0.42 | 0.37  | 0.18 |
| 2-CHLORO-2-METHYLBUTANE  | 0.55 | 0.32  | 0.46 | 0.40  | 0.20 |
| 3-CHLOROPROPENE          |      |       |      |       |      |
| 2,2-DIMETHYLBUTANE       | 0.23 | 0.20  | 0.24 | 0.30  | 0.18 |
| 3-METHYL-1-PENTENE       |      |       |      |       |      |
| 2,3-DIMETHYLBUTANE       | 0.48 | 0.36  | 0.47 | 0.61  | 0.33 |
| 3-METHYLPENTANE          | 0.93 | 0.73  | 0.88 | 0.86  | 0.64 |
| 1-HEXENE                 |      |       |      |       |      |
| CIS-1,2-DICHLOROETHYLENE |      |       |      |       |      |
| 2-CHLOROBUTANE           |      |       |      |       |      |
| HEXANE                   | 1.29 | 1.02  | 1.18 | 1.04  | 0.82 |
| CHLOROFORM               |      |       |      |       |      |
| TRANS-3-HEXENE           |      |       |      |       |      |
| 3-CHLORO-2-METHYLPROPENE |      |       |      |       |      |
| METHYLCYCLOPENTANE       | 0.42 | 0.33  | 0.40 | 0.31  | 0.28 |
| 1,2-DICHLOROETHANE       |      |       |      |       |      |
| 1,1,1-TRICHLOROETHANE    | 0.67 | 0.69  | 0.72 | 0.84  | 0.57 |
| 1-CHLOROBUTANE           |      |       |      |       |      |
| BENZENE                  | 1.19 | 99.66 | 1.17 | 17.18 | 0.96 |
| CARBON TETRACHLORIDE     |      |       |      |       |      |
| CYCLOHEXANE              |      | 0.03  |      |       |      |
| 2-METHYLHEXANE           | 1.54 | 1.65  | 1.38 | 0.98  | 0.94 |
| 2,3-DIMETHYLPENTANE      |      |       |      |       |      |
| CYCLOHEXENE              |      |       |      |       |      |
| DIBROMOMETHANE           |      |       |      |       |      |
| 3-METHYLHEXANE           | 1.23 | 0.93  | 1.03 | 0.74  | 0.70 |
| 1,2-DICHLOROPROPANE      |      |       |      |       |      |
| 2,3-DICHLOROPROPENE      |      |       |      |       |      |
| TRICHLOROETHYLENE        | 0.11 |       |      |       |      |
| 2,2,4-TRIMETHYLPENTANE   | 0.40 | 0.30  | 0.41 | 0.23  | 0.25 |
| 1-HEPTENE                |      |       |      |       |      |
| HEPTANE                  | 0.64 | 0.50  | 0.46 | 0.27  | 0.26 |
| 1-CHLORO-3-METHYLBUTANE  |      |       |      |       |      |



|                               |       |       |       |      |      |
|-------------------------------|-------|-------|-------|------|------|
| TRANS-2-HEPTENE               |       |       |       |      |      |
| METHYLCYCLOHEXANE             | 0.38  | 0.25  | 0.25  | 0.12 | 0.15 |
| 2,5-DIMETHYLHEXANE            | 0.14  |       |       |      |      |
| 4-METHYLCYCLOHEXENE           | 0.11  |       |       |      |      |
| 1-CHLOROPENTANE               |       |       |       |      |      |
| 1,1,2-TRICHLOROETHANE         |       |       |       |      |      |
| TOLUENE                       | 12.24 | 9.19  | 6.10  | 1.55 | 1.68 |
| 1,3-DICHLOROPROPANE           |       |       |       |      |      |
| 2-METHYLHEPTANE               |       |       |       | 0.15 | 0.20 |
| 1,2-DIBROMOETHANE             |       |       |       |      |      |
| 1-OCTENE                      |       |       |       |      |      |
| TRANS-1,2-DIMETHYLCYCLOHEXANE |       |       |       |      |      |
| TRANS-4-OCTENE                |       |       |       |      |      |
| TETRACHLOROETHYLENE           | 0.57  | 0.40  | 0.39  | 0.36 | 0.58 |
| OCTANE                        | 0.42  | 0.34  | 0.30  | 0.23 | 0.32 |
| 2-METHYL-1-HEPTENE            |       |       |       |      |      |
| 2-OCTENE                      |       |       |       |      |      |
| CIS-1,2-DIMETHYLCYCLOHEXANE   |       |       |       |      |      |
| CHLOROBENZENE                 |       | 0.27  |       |      |      |
| PROPYLCYCLOPENTANE            |       |       |       |      |      |
| ETHYLCYCLOHEXANE              | 0.21  | 0.12  | 0.16  |      | 0.16 |
| 1-CHLOROHEXANE                |       |       |       |      |      |
| ETHYLBENZENE                  | 10.07 | 7.15  | 5.10  | 0.48 | 0.26 |
| M-XYLENE + P-XYLENE           | 40.09 | 28.75 | 20.94 | 2.21 | 0.76 |
| STYRENE                       |       |       |       |      |      |
| 1,4-DICHLOROBUTANE            |       |       |       |      |      |
| O-XYLENE                      | 9.50  | 7.04  | 5.37  | 0.77 | 0.23 |
| 1,1,2,2-TETRACHLOROETHANE     |       |       |       |      |      |
| 1,2,3-TRICHLOROPROPANE        |       |       |       |      |      |
| 1-NONENE                      |       |       |       |      |      |
| NONANE                        | 0.62  | 0.42  | 0.40  | 0.17 | 0.12 |
| ISOPROPYLBENZENE              | 0.27  | 0.21  | 0.18  |      |      |
| 2-CHLOROTOLUENE               |       |       |       |      |      |
| 3-CHLOROTOLUENE               |       |       |       |      |      |
| N-PROPYLBENZENE               | 0.36  | 0.22  | 0.21  |      |      |
| 4-CHLOROTOLUENE               | 0.26  | 0.16  | 0.19  | 0.26 |      |
| 3-ETHYLTOLUENE                | 2.28  | 1.45  | 1.55  | 0.82 | 0.13 |
| 4-ETHYLTOLUENE                |       | 0.66  |       |      |      |
| 1,3,5-TRIMETHYLBENZENE        | 0.64  | 0.49  | 0.43  | 0.25 |      |
| 2-ETHYLTOLUENE                | 0.76  | 0.56  | 0.52  | 0.30 |      |
| T-BUTYLBENZENE                |       |       | 2.00  |      |      |
| 1,2,4-TRIMETHYLBENZENE        | 1.92  | 1.55  | 1.43  | 0.69 |      |
| 1,3-DICHLOROBENZENE           |       |       |       |      |      |
| 1-DECENE                      |       |       |       |      |      |
| A-CHLOROTOLUENE               |       |       |       |      |      |
| 1,5-DICHLOROPENTANE           |       |       |       |      |      |
| DECANE                        | 0.55  | 0.42  | 0.43  | 0.22 |      |
| SEC. BUTYLBENZENE             |       |       |       |      |      |
| 3-(CHLOROMETHYL)-HEPTANE      |       |       |       |      |      |
| 1,2,3-TRIMETHYLBENZENE        | 0.45  | 0.34  | 0.27  | 0.14 |      |
| 1-ISOPROPYL-4-METHYLBENZENE   |       |       |       |      |      |
| 1,2-DICHLOROBENZENE           |       |       |       |      |      |
| INDAN                         | 0.14  | 0.12  | 0.09  |      |      |
| N-BUTYLCYCLOHEXANE            |       |       |       |      |      |
| 1,3-DIETHYLBENZENE            |       |       |       |      |      |
| 1,4-DIETHYLBENZENE            |       |       |       |      |      |
| N-BUTYLBENZENE                |       |       |       |      |      |
| 1,2-DIETHYLBENZENE            |       |       |       |      |      |
| DECALIN                       |       |       |       |      |      |
| UNDECANE                      | 0.51  | 0.29  |       |      |      |
| 1,2,3,5-TETRAMETHYLBENZENE    |       |       |       |      |      |
| DIISOPROPYLBENZENE            |       |       |       |      |      |
| 1,2,3,4-TETRAMETHYLBENZENE    |       |       |       |      |      |
| TETRALIN                      |       |       |       |      |      |
| DODECANE                      | 1.82  |       |       |      |      |

|                                 |         |          |         |         |         |
|---------------------------------|---------|----------|---------|---------|---------|
| Total hydrocarbons ug/m3:       | 110.57  | 190.60   | 72.17   | 63.15   | 26.25   |
| Alkanes ug/m3                   | 25.14   | 29.08    | 22.47   | 35.67   | 19.40   |
| Cycloalkanes ug/m3              | 1.01    | 0.73     | 0.81    | 0.43    | 0.59    |
| Alkenes ug/m3                   | 0.93    | 0.91     | 0.82    | 0.80    | 0.42    |
| Cycloalkenes ug/m3              | 0.11    | 0.00     | 0.00    | 0.00    | 0.00    |
| Alkynes ug/m3                   | 0.00    | 0.00     | 0.00    | 0.00    | 0.00    |
| Aromatics ug/m3                 | 79.91   | 157.39   | 45.36   | 24.39   | 4.02    |
| Chlorinated alkanes ug/m3       | 2.53    | 1.66     | 2.13    | 1.24    | 1.24    |
| Chlorinated alkenes ug/m3       | 0.68    | 0.40     | 0.39    | 0.36    | 0.58    |
| Chlorinated aromatics ug/m3     | 0.26    | 0.43     | 0.19    | 0.26    | 0.00    |
|                                 |         |          |         |         |         |
| Total # of compounds identified | 45      | 44       | 41      | 35      | 31      |
|                                 |         |          |         |         |         |
| Total # of peaks                | 74      | 84       | 66      | 69      | 42      |
|                                 |         |          |         |         |         |
| Total area of peaks             | 6126.60 | 11798.50 | 3798.50 | 3672.50 | 1226.00 |
|                                 |         |          |         |         |         |
| Area of identified peaks        | 5699.60 | 10156.00 | 3460.00 | 3002.30 | 1074.00 |
|                                 |         |          |         |         |         |
| Area % identified peaks         | 93      | 86       | 91      | 82      | 88      |
|                                 |         |          |         |         |         |
| Toluene:Ethylbenzene            | 1.22    | 1.29     | 1.20    | 3.23    | 6.46    |
| Benzene:Ethylbenzene            | 0.12    | 13.94    | 0.23    | 35.79   | 3.69    |
| Xylenes:Ethylbenzene            | 4.92    | 5.01     | 5.16    | 6.21    | 3.81    |
| Ethylbenzene:Ethylbenzene       | 1.00    | 1.00     | 1.00    | 1.00    | 1.00    |

## SURVEY NAME

LONDON AUGUST-SEPTEMBER 1984

MAMU#2

DATE: SEPTEMBER 6/84

units ug/m3

MAMU LOCATION #

063B

063B

TIME PERIOD

1458-1558

1558-1658

|                          |       |       |
|--------------------------|-------|-------|
| PROPANE                  | 1.20  | 3.99  |
| PROPADIENE               |       |       |
| PROPYNE                  |       |       |
| CHLOROMETHANE            |       |       |
| CYCLOPROPANE             |       |       |
| ISOBUTANE                | 1.81  | 1.61  |
| VINYL CHLORIDE           |       |       |
| 1-BUTENE                 |       |       |
| 1,3-BUTADIENE            |       |       |
| BUTANE                   | 12.13 | 5.41  |
| 1-BUTYNE                 |       |       |
| CHLOROETHANE             |       |       |
| 3-METHYL-1-BUTENE        |       |       |
| 2-METHYLBUTANE           | 20.61 | 8.85  |
| 1-PENTENE                | 0.39  |       |
| PENTANE                  | 10.37 | 4.86  |
| ISOPRENE                 |       |       |
| TRANS-2-PENTENE          | 1.07  | 0.53  |
| DICHLOROMETHANE          |       |       |
| 2-METHYL-2-BUTENE        | 1.09  | 0.24  |
| 2-CHLORO-2-METHYLBUTANE  |       |       |
| 3-CHLOROPROPENE          |       |       |
| 2,2-DIMETHYLBUTANE       |       | 0.30  |
| 3-METHYL-1-PENTENE       |       |       |
| 2,3-DIMETHYLBUTANE       | 1.41  | 0.82  |
| 3-METHYLPENTANE          | 2.55  | 1.70  |
| 1-HEXENE                 |       | 0.11  |
| CIS-1,2-DICHLOROETHYLENE |       |       |
| 2-CHLOROBUTANE           |       |       |
| HEXANE                   | 3.20  | 2.50  |
| CHLOROFORM               |       |       |
| TRANS-3-HEXENE           | 0.10  |       |
| 3-CHLORO-2-METHYLPROPENE |       |       |
| METHYLCYCLOPENTANE       | 1.05  | 0.77  |
| 1,2-DICHLOROETHANE       |       |       |
| 1,1,1-TRICHLOROETHANE    |       | 1.10  |
| 1-CHLOROBUTANE           |       |       |
| BENZENE                  | 1.63  | 10.57 |
| CARBON TETRACHLORIDE     |       |       |
| CYCLOHEXANE              |       |       |
| 2-METHYLHEXANE           | 2.71  | 2.56  |
| 2,3-DIMETHYLPENTANE      |       |       |
| CYCLOHEXENE              |       |       |
| DIBROMOMETHANE           |       |       |
| 3-METHYLHEXANE           | 2.74  | 2.01  |
| 1,2-DICHLOROPROPANE      |       |       |
| 2,3-DICHLOROPROPENE      |       |       |
| TRICHLOROETHYLENE        |       | 0.15  |
| 2,2,4-TRIMETHYLPENTANE   | 0.92  | 0.54  |
| 1-HEPTENE                |       |       |
| HEPTANE                  | 1.34  | 0.84  |
| 1-CHLORO-3-METHYLBUTANE  |       |       |

|                               |      |      |
|-------------------------------|------|------|
| TRANS-2-HEPTENE               |      |      |
| METHYLCYCLOHEXANE             | 0.54 | 0.32 |
| 2,5-DIMETHYLHEXANE            | 0.28 | 0.21 |
| 4-METHYLCYCLOHEXENE           | 0.16 | 0.11 |
| 1-CHLOROPENTANE               |      |      |
| 1,1,2-TRICHLOROETHANE         |      |      |
| TOLUENE                       | 6.13 | 4.84 |
| 1,3-DICHLOROPROPANE           |      |      |
| 2-METHYLHEPTANE               | 0.40 |      |
| 1,2-DIBROMOETHANE             |      |      |
| 1-OCTENE                      |      |      |
| TRANS-1,2-DIMETHYLCYCLOHEXANE |      |      |
| TRANS-4-OCTENE                |      |      |
| TETRACHLOROETHYLENE           | 0.57 | 0.32 |
| OCTANE                        | 0.48 | 0.41 |
| 2-METHYL-1-HEPTENE            |      |      |
| 2-OCTENE                      |      |      |
| CIS-1,2-DIMETHYLCYCLOHEXANE   |      |      |
| CHLOROBENZENE                 |      |      |
| PROPYLCYCLOPENTANE            |      |      |
| ETHYLCYCLOHEXANE              | 0.15 | 0.12 |
| 1-CHLOROHEXANE                |      |      |
| ETHYLBENZENE                  | 0.91 | 0.85 |
| M-XYLENE + P-XYLENE           | 3.10 | 2.94 |
| STYRENE                       |      |      |
| 1,4-DICHLOROBUTANE            |      |      |
| O-XYLENE                      | 0.93 | 0.88 |
| 1,1,2,2-TETRACHLOROETHANE     |      |      |
| 1,2,3-TRICHLOROPROPANE        |      |      |
| 1-NONENE                      |      |      |
| NONANE                        | 0.18 | 0.18 |
| ISOPROPYLBENZENE              |      |      |
| 2-CHLOROTOLUENE               |      |      |
| 3-CHLOROTOLUENE               |      |      |
| N-PROPYLBENZENE               | 0.13 |      |
| 4-CHLOROTOLUENE               | 0.08 | 0.22 |
| 3-ETHYLTOLUENE                | 0.92 | 0.97 |
| 4-ETHYLTOLUENE                | 0.36 |      |
| 1,3,5-TRIMETHYLBENZENE        | 0.25 | 0.29 |
| 2-ETHYLTOLUENE                | 0.31 | 0.35 |
| 7-BUTYLBENZENE                |      |      |
| 1,2,4-TRIMETHYLBENZENE        | 0.72 | 0.72 |
| 1,3-DICHLOROBENZENE           |      |      |
| 1-DECENE                      |      |      |
| A-CHLOROTOLUENE               |      |      |
| 1,5-DICHLOROPENTANE           |      |      |
| DECANE                        | 0.20 | 0.18 |
| SEC. BUTYLBENZENE             |      |      |
| 3-(CHLOROMETHYL)-HEPTANE      |      |      |
| 1,2,3-TRIMETHYLBENZENE        | 0.15 |      |
| 1-ISOPROPYL-4-METHYLBENZENE   |      |      |
| 1,2-DICHLOROBENZENE           |      |      |
| INDAN                         | 0.10 | 0.11 |
| N-BUTYLCYCLOHEXANE            |      |      |
| 1,3-DIETHYLBENZENE            |      |      |
| 1,4-DIETHYLBENZENE            |      |      |
| N-BUTYLBENZENE                |      |      |
| 1,2-DIETHYLBENZENE            |      |      |
| DECALIN                       |      |      |
| UNDECANE                      |      |      |
| 1,2,3,5-TETRAMETHYLBENZENE    |      |      |
| DIISOPROPYLBENZENE            |      |      |
| 1,2,3,4-TETRAMETHYLBENZENE    |      |      |
| TETRALIN                      |      |      |
| DODECANE                      |      |      |

|                             |       |       |
|-----------------------------|-------|-------|
| Total hydrocarbons ug/m3:   | 83.37 | 63.48 |
| Alkanes ug/m3               | 62.53 | 36.97 |
| Cycloalkanes ug/m3          | 1.74  | 1.21  |
| Alkenes ug/m3               | 2.65  | 0.88  |
| Cycloalkenes ug/m3          | 0.16  | 0.11  |
| Alkynes ug/m3               | 0.00  | 0.00  |
| Aromatics ug/m3             | 15.64 | 22.52 |
| Chlorinated alkanes ug/m3   | 0.00  | 1.10  |
| Chlorinated alkenes ug/m3   | 0.57  | 0.47  |
| Chlorinated aromatics ug/m3 | 0.08  | 0.22  |

|                                 |    |    |
|---------------------------------|----|----|
| Total # of compounds identified | 40 | 38 |
|---------------------------------|----|----|

|                  |    |    |
|------------------|----|----|
| Total # of peaks | 68 | 78 |
|------------------|----|----|

|                     |         |         |
|---------------------|---------|---------|
| Total area of peaks | 4219.51 | 6242.00 |
|---------------------|---------|---------|

|                          |         |         |
|--------------------------|---------|---------|
| Area of identified peaks | 3636.41 | 3052.00 |
|--------------------------|---------|---------|

|                         |    |    |
|-------------------------|----|----|
| Area % identified peaks | 86 | 49 |
|-------------------------|----|----|

|                      |      |      |
|----------------------|------|------|
| Toluene:Ethylbenzene | 6.74 | 5.69 |
|----------------------|------|------|

|                      |      |       |
|----------------------|------|-------|
| Benzene:Ethylbenzene | 1.79 | 12.44 |
|----------------------|------|-------|

|                      |      |      |
|----------------------|------|------|
| Xylenes:Ethylbenzene | 4.43 | 4.49 |
|----------------------|------|------|

|                           |      |      |
|---------------------------|------|------|
| Ethylbenzene:Ethylbenzene | 1.00 | 1.00 |
|---------------------------|------|------|



|                               |      |
|-------------------------------|------|
| TRANS-2-HEPTENE               |      |
| METHYLCYCLOHEXANE             | 0.54 |
| 2,5-DIMETHYLHEXANE            | 0.36 |
| 4-METHYLCYCLOHEXENE           |      |
| 1-CHLOROPENTANE               |      |
| 1,1,2-TRICHLOROETHANE         |      |
| TOLUENE                       | 9.21 |
| 1,3-DICHLOROPROPANE           |      |
| 2-METHYLHEPTANE               |      |
| 1,2-DIBROMOETHANE             |      |
| 1-OCTENE                      |      |
| TRANS-1,2-DIMETHYLCYCLOHEXANE |      |
| TRANS-4-OCTENE                |      |
| TETRACHLOROETHYLENE           | 1.23 |
| OCTANE                        | 0.59 |
| 2-METHYL-1-HEPTENE            |      |
| 2-OCTENE                      |      |
| CIS-1,2-DIMETHYLCYCLOHEXANE   |      |
| CHLOROBENZENE                 |      |
| PROPYLCYCLOPENTANE            |      |
| ETHYLCYCLOHEXANE              |      |
| 1-CHLOROHEXANE                |      |
| ETHYLBENZENE                  | 0.91 |
| M-XYLENE + P-XYLENE           | 2.90 |
| STYRENE                       |      |
| 1,4-DICHLOROBUTANE            |      |
| O-XYLENE                      | 0.91 |
| 1,1,2,2-TETRACHLOROETHANE     |      |
| 1,2,3-TRICHLOROPROPANE        |      |
| 1-NONENE                      |      |
| NONANE                        | 0.29 |
| ISOPROPYLBENZENE              |      |
| 2-CHLOROTOLUENE               |      |
| 3-CHLOROTOLUENE               |      |
| N-PROPYLBENZENE               | 0.19 |
| 4-CHLOROTOLUENE               | 0.19 |
| 3-ETHYLTOLUENE                | 1.51 |
| 4-ETHYLTOLUENE                |      |
| 1,3,5-TRIMETHYLBENZENE        | 0.38 |
| 2-ETHYLTOLUENE                | 0.48 |
| T-BUTYLBENZENE                |      |
| 1,2,4-TRIMETHYLBENZENE        | 1.09 |
| 1,3-DICHLOROBENZENE           |      |
| 1-DECENE                      |      |
| A-CHLOROTOLUENE               |      |
| 1,5-DICHLOROPENTANE           |      |
| DECANE                        | 0.33 |
| SEC. BUTYLBENZENE             |      |
| 3-(CHLOROMETHYL)-HEPTANE      |      |
| 1,2,3-TRIMETHYLBENZENE        | 0.25 |
| 1-ISOPROPYL-4-METHYLBENZENE   |      |
| 1,2-DICHLOROBENZENE           |      |
| INDAN                         |      |
| N-BUTYLCYCLOHEXANE            |      |
| 1,3-DIETHYLBENZENE            |      |
| 1,4-DIETHYLBENZENE            |      |
| N-BUTYLBENZENE                |      |
| 1,2-DIETHYLBENZENE            |      |
| DECALIN                       |      |
| UNDECANE                      |      |
| 1,2,3,5-TETRAMETHYLBENZENE    |      |
| DIISOPROPYLBENZENE            |      |
| 1,2,3,4-TETRAMETHYLBENZENE    |      |
| TETRALIN                      |      |
| DODECANE                      |      |

|                             |       |
|-----------------------------|-------|
| Total hydrocarbons ug/m3:   | 87.05 |
| Alkanes ug/m3               | 60.26 |
| Cycloalkanes ug/m3          | 1.39  |
| Alkenes ug/m3               | 1.15  |
| Cycloalkenes ug/m3          | 0.00  |
| Alkynes ug/m3               | 0.00  |
| Aromatics ug/m3             | 20.29 |
| Chlorinated alkanes ug/m3   | 2.36  |
| Chlorinated alkenes ug/m3   | 1.41  |
| Chlorinated aromatics ug/m3 | 0.19  |

|                                 |    |
|---------------------------------|----|
| Total # of compounds identified | 38 |
|---------------------------------|----|

|                  |    |
|------------------|----|
| Total # of peaks | 56 |
|------------------|----|

|                     |         |
|---------------------|---------|
| Total area of peaks | 4504.49 |
|---------------------|---------|

|                          |         |
|--------------------------|---------|
| Area of identified peaks | 3638.09 |
|--------------------------|---------|

|                         |    |
|-------------------------|----|
| Area % identified peaks | 81 |
|-------------------------|----|

|                      |       |
|----------------------|-------|
| Toluene:Ethylbenzene | 10.12 |
|----------------------|-------|

|                      |      |
|----------------------|------|
| Benzene:Ethylbenzene | 2.70 |
|----------------------|------|

|                      |      |
|----------------------|------|
| Xylenes:Ethylbenzene | 4.19 |
|----------------------|------|

|                           |      |
|---------------------------|------|
| Ethylbenzene:Ethylbenzene | 1.00 |
|---------------------------|------|



## Appendix C

### Weather Synopses

#### Aug. 27, 1984

High centred over the Carolinas. "Back of high" situation. Region is S-SW flow with typical wind speeds of 10-25 km/h. Airmass dry and stable. Sunny skies prevailed with a maximum temperature of 27°C in the London area.

#### Aug. 28, 1984

Slow-moving warm frontal system over the district. S-SW winds 10-15 km/h prevailed. Airmass moist and unstable. Cloudy skies with a few showers, and a maximum temperature of 26°C.

#### Aug. 30, 1984

Frontal system moving through the Lower Great Lakes. Light winds in the morning becoming W-NW 5 to 15 km/h in the afternoon. Airmass and unstable. Cloudy with a few showers. High temperature of 23°C.

#### Aug. 31, 1984

Region under "front of the high"/behind cold front flow. Light winds in morning becoming W-SW 5 to 15 km/h in the afternoon. Airmass dry and stable. Sunny skies and cool conditions prevailed. High of 22°C.

#### Sept. 1, 1984

Frontal system over the area. Westerly flow 5 to 10 km/h prevailed. Cloudy with showers. Airmass moist and unstable. High of 21°C.

Sept. 2, 1984

Region in warm sector. Airmass moist and unstable. Partly cloudy with showers/thunderstorms. SE winds 10 to 20 km/h. High of 27°C.

Sept. 3, 1984

Frontal system moving through the Lower Great Lakes. Cloudy with showers. Airmass moist and unstable. Winds N 10 to 15 km/h. High of 20°C.

Sept. 4, 1984

Behind cold front flow. N-NW winds 10 to 20 km/h. Partly cloudy. Airmass moist and unstable. High of 19°C.

Sept. 5, 1984

Frontal system moving through the Lower Great Lakes. Airmass moist and unstable. NW winds 10 to 20 km/h. Variable cloudiness. High of 17°C.

Sept. 6, 1984

High centred over the regions. Light and variable winds 5 to 15 km/h prevailed. Airmass dry and stable. Sunny skies. High of 18°C.

Sept. 7, 1984

Frontal system approaching the region. Cloudy skies. Airmass moist and unstable. SE winds 10 to 25 km/h. High of 20°C.